

# Alameda County Climate Action Plan for Government Services and Operations Through 2026



Alameda County  
**SUSTAINABILITY**  
*Local Action, Global Impact.*

Published:

**DRAFT - 4/10/23**

CONTENTS

**Executive Summary** ..... 3

**Message From the Alameda County Board of Supervisors** ..... 16

**Plan Overview** ..... 17

    Our Climate Challenge ..... 18

    Goals and Principles ..... 26

    Plan Development ..... 45

    Implementation ..... 70

    Guide to the Report ..... 78

**Built Environment** ..... 84

**Community Resilience** ..... 122

**Green Economy and Prosperity** ..... 170

**Sustainable Materials Management** ..... 197

**Transportation** ..... 222

**Climate Leadership and Governance** ..... 254

**Appendices** ..... 298

    A. Credits ..... 299

    B. Acknowledgements ..... 301

    C. Action Area Summaries ..... 304

    D. Outcomes of 2010 Climate Action Plan ..... 411



# Executive Summary

## SECTIONS

**A Resilient and Fossil-Free Future**

**How We Developed the Plan**

**What We Aim to Accomplish**

**How We Have Structured the Plan**

**How We Will Implement and Evaluate the Plan**

**Conclusion**



Together, this plan and others in the region will help keep our community safe and contribute to national and global carbon reduction goals.

## A Resilient and Fossil-Free Future

Scientists have long warned of the dangers of climate change. In recent years, these have become impossible for our community and region to ignore: eerie orange skies and hazardous air quality caused by smoke from out-of-control wildfires, extreme heat exacerbating existing health conditions, especially for the elderly and small children. A multi-year drought combined with flooding from a series of atmospheric rivers has shown the extremes climate change can create. These dangerous events are expected to become only more common.

This climate action plan builds on our past progress. Alameda County recognized the threat climate change poses with our first formal commitment to action in 2006. The County previously adopted two climate action plans: one focused on our operations and services in 2010 and one focused on our unincorporated community in 2014. (See these plans [here](#).) Our plans are policy tools that establish how we plan to reduce our greenhouse gas emissions and respond to related climate impacts.

Our Climate Action Plan for Government Operations and Services Through 2020, adopted in 2010, set a path for County operations to achieve a minimum greenhouse gas emissions reduction of 15 percent and a stretch target of 30 percent by 2020 from a 2003 baseline. The plan also set a long-term target of an 80 percent reduction in emissions by 2050. Our efforts exceeded the 2020 stretch target: we achieved a 31 percent reduction in operational emissions.

Guided by this plan, we will invest in resilient service delivery and aggressively pursue emissions reductions in the County's operations. We look forward to supporting and collaborating with the communities and groups already being affected by climate change. Thousands of communities across the country are taking action, and we are proud to join them.

This new climate action plan sets a target for County services and operations that exceeds our earlier 2050 target and aligns with California’s target of carbon neutrality by 2045. It establishes a series of steps the County needs to take between 2023 and 2026 to move us toward that goal. And it establishes a set of actions to both protect our community from climate impacts and protect the County assets and services important to serving the public.

Climate action aligns with the County’s strategic planning. [Vision 2026](#), the County’s vision for anticipating community challenges and meeting residents’ needs, was adopted in 2018 and provides goals and guiding principles for County work through 2026. It includes four vision elements—Healthy Environment, Safe and Livable Communities, Thriving and Resilient Population, and Prosperous and Vibrant Economy—which are all supported by climate action.

## How We Developed the Plan

We began work on the plan with baseline assessments of our operational and supply chain emissions. The last plan focused largely on cutting emissions and was a 10-year plan. We soon realized that we needed to take a different approach for this plan. We decided on a four-year timeframe, which aligns with the Vision 2026 update in 2026. As the Bay Area was battered by climate change’s effects, including severe storms and heat waves, it became increasingly clear that we needed to think not only about future emission reductions but also about mitigating the effects that were already here. The COVID-19 pandemic highlighted existing inequities within the County and the need to prioritize equity in our planning process.



## Equity

The County is committed to addressing racial injustice and other social and health inequities. To help develop measures and priorities, we partnered with an experienced climate plan consulting firm, a local equity consultant, and community organizations to convene focus groups, listening sessions, and door-to-door surveys with members of frontline communities—groups disproportionately burdened by climate change—to understand and incorporate their needs, priorities, and concerns.

Project teams of County employees also reviewed measures using the pilot [Equity Amplification Tool](#), a worksheet with questions on equity implications of draft climate measures.

### **Public Outreach and Staff Engagement**

In addition to our outreach to frontline communities, we conducted an online public survey, held workshops, and set up two online feedback forums for our residents to share their priorities and concerns. Written documents, such as the survey, were available in English, traditional Chinese, and Spanish, and interpretation was offered for workshops.

Internal work on the plan was guided by a Climate Action Development Group, comprised of more than 30 staff from 10 agencies. The group set the strategic direction and assisted in plan development as managers and implementers of climate action in their respective roles. County leads for climate action areas, such as built environment or transportation, regularly consulted staff who will implement measures or have relevant expertise in those areas. We also invited County employees to weigh in on the plan through an employee climate survey.

### **What We Aim to Accomplish**

The plan sets the County on a path toward the goal of carbon neutrality for government services and operations by 2045. Climate neutrality means removing the amount of greenhouse gas emissions that we produce beyond what the planet naturally removes; it requires dramatically reducing greenhouse gas emissions. To meet this goal, the County must:

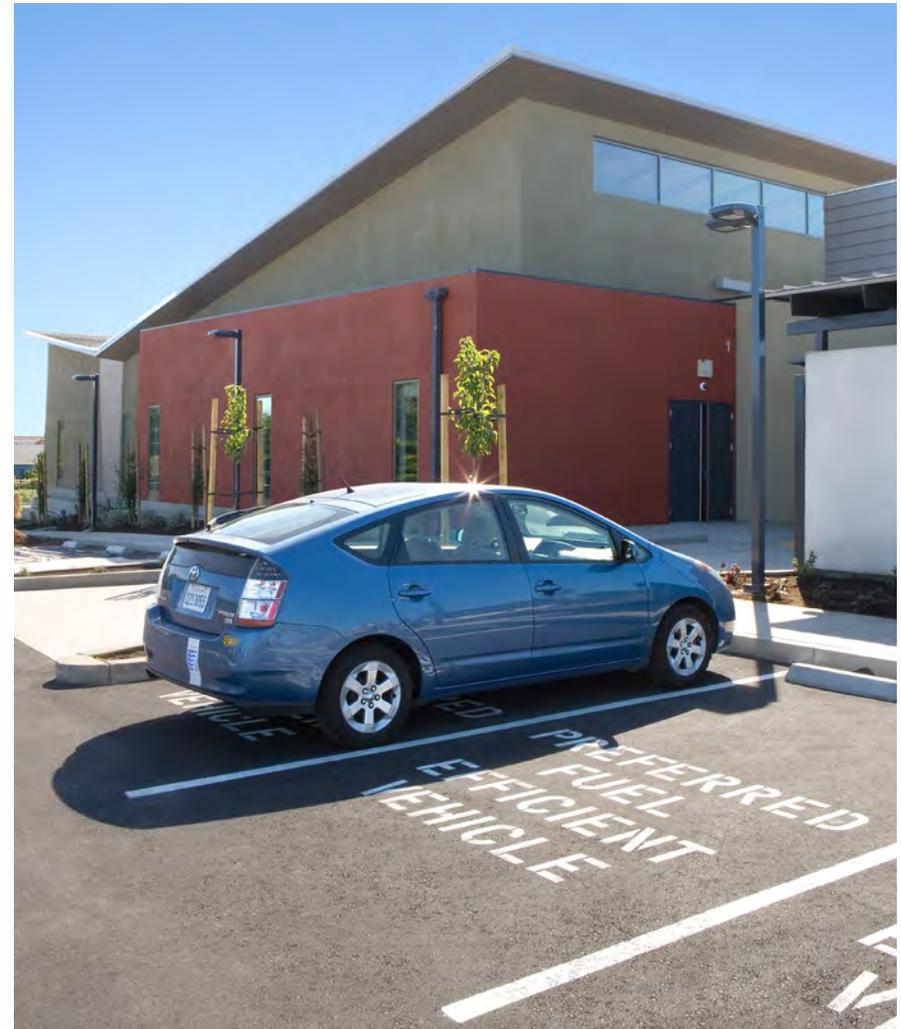
- Expand mobile work and virtual-first service delivery, which reduce the need for employees and County clients to commute to work or to travel to receive services.
- Consolidate space needs and use County-owned and -leased space efficiently to avoid wasting resources, including electricity, gas, and water, on underused space.
- Electrify County building equipment.

The plan sets the County on a path toward the goal of carbon neutrality for government services and operations by 2045.

- Continue to purchase carbon-free renewable electricity from the local power provider.
- Electrify the County vehicle fleet and expand electric vehicle (EV) charging infrastructure.
- Continue to use renewable fuel sources, such as renewable diesel, for vehicles in our fleet that do not yet have viable electric alternatives.
- Support the development of a regional circular economy for goods and food through reuse, repair, redistribution, and procurement activities.

In addition, we aim to develop resilient services and support resilient neighborhoods. Resilience metrics are less standardized than greenhouse gas reduction metrics, so we will need to develop an approach to measure resilience outcomes that are influenced by county government action. We know that to help our services and our region become more resilient, the County must:

- Invest in preparedness for specific impacts, including wildfires, storms, and floods.
- Provide protective actions training to the public, to County employees, and to community-based partners, such as how to prepare for heat waves.
- Increase accessibility of resources for preparedness and information during emergencies by diversifying languages and communication channels.
- Expand support for populations most affected by climate impacts, including low-income communities, communities of color, people experiencing homelessness, older adults, and people with disabilities.
- Build systems to coordinate across County agencies and with community and regional partners to reach shared goals.



*Credit: Sibila Savage*

## How We Have Structured the Plan

The plan is divided into six action areas, each of which plays a key role in reaching our goals: Built Environment, Community Resilience, Green Economy and Prosperity, Sustainable Materials Management, Transportation, and Climate Leadership and Governance. Each action area has:

- An introductory narrative to orient readers.
- Two to four subsections containing groups of aligned measures.
- Seven to 12 measures in total, each with a table showing the actions or “submeasures” to achieve the measure’s goals.

For each measure, a table lists all submeasures, the key departments implementing them, their priority climate action benefits and any co-benefits, and the amount of investment needed. Icons used in these tables are described in the plan overview.

### Action Areas

#### Built Environment (BE)

Manage the County’s buildings, infrastructure, and landscapes to reduce greenhouse gas emissions and increase the climate resilience of our County portfolio.

#### Community Resilience (CR)

Increase the resilience and preparedness of the communities we serve to protect from climate shocks like heat waves, wildfires, or flooding.

#### Green Economy and Prosperity (GEP)

Invest in win-win strategies that reduce the County’s environmental footprint while growing the local economy and creating jobs and economic opportunity for residents.

#### Sustainable Materials Management (SMM)

Implement upstream solutions and circular economy principles to reduce the amount of waste generated in County operations.

#### Transportation (T)

Reduce greenhouse gas emissions in the County’s fleet operations and employee commutes.

#### Climate Leadership and Governance (CLG)

Amplify actions through external communications; reduce climate risk in investments; and provide a foundation for other plan actions by creating implementation structures, addressing cross-cutting approaches like telework, and supporting employees to prepare for climate impacts.

## Built Environment (BE)

Alameda County owns or leases approximately 8.7 million square feet of facilities and maintains public infrastructure in unincorporated areas. Achieving our climate target will require us to decarbonize energy use by transitioning away from natural gas to electric-powered equipment in our buildings. This will eliminate burning fossil fuels on-site and instead power equipment with renewable energy. We plan to design and construct new buildings and major renovations to produce zero carbon emissions, maximize energy efficiency, and incorporate distributed energy resources. We will also reduce sources of greenhouse gas emissions by locating new buildings near public transportation, using space efficiently, selecting equipment with lower global warming potential refrigerants, and choosing lower-carbon construction materials, practices, and designs. We plan to complement these efforts by sequestering carbon through smart landscape management choices.

As County facilities provide many essential services to residents, we will take steps to make our built environment resilient to climate risks, such as adding battery storage at buildings so they can operate during power outages.



*Credit: David Wakely. Artwork in the County's Castro Valley Library by Jos Sances, part of the Alameda County Art Collection.*

## BUILT ENVIRONMENT MEASURES

### Program Management

BE 1: Policy Development and Program Management

### Reduce Emissions

BE 2: Decarbonize New Construction

BE 3: Decarbonize the Existing Portfolio

BE 4: Low-Carbon Operations

BE 5: Green Lease

### Reduce and Remove Carbon

BE 6: Optimize Site and Space Planning for Carbon Efficiency

BE 7: Minimize Life Cycle Carbon Emissions of Construction and Building Materials

BE 8: Carbon Sequestration

### Prepare the Portfolio

BE 9: Climate Resilience for the Building and Infrastructure Portfolio

BE 10: Manage Lands for Climate Resilience

BE 11: Water Conservation and Drought Preparedness

## Community Resilience (CR)

An important part of the County's mission is to provide services to our communities, including social, health, public safety, and infrastructure services. To continue providing essential services, we will prepare our County emergency management systems and health and social programs to ensure that they can function during climate shocks.



One of the needed services is to help our communities become more resilient to climate change impacts such as wildfires, sea level rise, and changes in precipitation patterns. We will support our communities by creating accessible resources and resilience facilities and supporting our residents' mental health. We will help our communities prepare by sharing locally relevant information on climate-related emergencies and ways they can protect themselves. Outreach will emphasize reaching our residents who are most harmed by climate change and our historically and presently underreached communities.

## COMMUNITY RESILIENCE MEASURES

### County System Preparedness

- CR 1: Resilient Emergency Management
- CR 2: Outreach and Communications
- CR 3: Resilient Health and Social Services

### Community Preparedness

- CR 4: Resources for Resilience
- CR 5: Place-Based Resilience
- CR 6: Mental Health and Resilience

### External Coordination

- CR 7: Regional Resilience
- CR 8: Equitable Community Engagement

### Specific Impact Readiness

- CR 9: Reduce Fire Risk
- CR 10: Flood Control

## Green Economy and Prosperity (GEP)

As a county government, we want to ensure our communities and local businesses share in the benefits of the transition to the low-carbon and socially inclusive green economy. Being employed and housed and having resources for self-protection help people be resilient to the impacts of climate change. This section of the plan includes diverse strategies at the intersection of ecology, economy, and equity.



We will help current and future County vendors and service providers operate more sustainably, help their clients become more prepared, and stay safe from climate impacts. We will support County departments and vendors in recovering food and reducing food waste and in sourcing lower-carbon food choices. We will also support County farmers and a local sustainable food economy through land use and neighborhood-based programs and incorporate [circular economy](#) principles throughout the County and region.

To ensure the green economy benefits residents, we plan to expand our partnerships with local workforce development programs to support a diverse, trained, and ready workforce.

## GREEN ECONOMY AND PROSPERITY MEASURES

### Procurement

- GEP 1: Vendor Sustainability and Resilience
- GEP 2: Contracting With Small Nonprofits

### Workforce

- GEP 3: Hiring on Climate-Related Large Capital Projects
- GEP 4: Green Job Promotion
- GEP 5: Growing the Alameda County Climate Workforce

### Materials Management

- GEP 6: Developing the Regional Circular Economy
- GEP 7: Expanding Edible Food Recovery
- GEP 8: Sourcing Healthier, Low-Carbon Food
- GEP 9: Integrated Circular Food Economy

## Sustainable Materials Management (SMM)

We will incorporate upstream waste reduction initiatives in our operations and move away from linear and disposal-based practices to reduce emissions from extracting, producing, manufacturing, transporting, and distributing new products. Focus areas

include providing technical assistance and outreach through programs and projects to reduce waste generated by the County. This involves educating staff, stakeholders, and community members to get more people involved in waste reduction programs. Another focus is supporting a circular economy, to keep goods and materials in use for as long as possible, by expanding internal reuse and repair efforts, exploring alternatives to new purchases, implementing policy support of these efforts, and developing strategies for hosting zero-waste County events and meetings.

In procurement, we will strengthen purchasing policies to minimize the environmental impact of high-priority County goods, such as technology and furniture, and use our purchasing power to help develop the market for sustainable design and manufacturing. Lastly, we will promote circular economy principles in the built environment by salvaging building materials and durable goods from demolished buildings and using them in new buildings and renovations.



*Photo of Tool Lending Library by David Wakely, courtesy of Berkeley Public Library*

## SUSTAINABLE MATERIALS MANAGEMENT MEASURES

### Technical Assistance and Outreach

SMM 1: Operational Program Implementation

SMM 2: Education and Outreach Strategy

### Circular Economy

SMM 3: Reuse Hierarchy Policy

SMM 4: Reuse and Repair Implementation

SMM 5: Zero-Waste Events

### Procurement

SMM 6: Strengthening Purchasing Policy

SMM 7: Construction and Demolition

## Transportation (T)

County employees' commutes and on-the-job travel contribute a large portion of our operational emissions. Support for remote work is covered in the Climate Leadership and Governance action area. Sustainable transportation for employees to work and at work is outlined in this action area. We need to make the County's fleet green. We plan to do this by electrifying vehicles in line with the state's 2035 zero-emission vehicle mandate and improving fleet efficiency. This includes the efficiency of Public Works Department vehicles, which are often heavy and diesel-burning. We also need to support clean commutes. This section recommends approaches to incentivize and support employees to travel in more efficient ways than driving alone, such as by expanding shuttle and bike services.



## TRANSPORTATION MEASURES

### Green Fleet

- T 1: Fleet Transition
- T 2: Fleet Management
- T 3: Sustainable Fleet Practices
- T 4: Public Works Agency Fleet

### Employee Commutes

- T 5: Clean Commute Incentives
- T 6: Smart Parking Policies
- T 7: Shuttle and Bike Services
- T 8: Micromobility
- T 9: Transit Pass Program

## Climate Leadership and Governance (CLG)

Moving a plan from words to action requires people to lead it and effective foundational policies. The Climate Leadership and Governance action area includes four focus categories: advocacy and outreach to advance climate action, an operational framework for plan implementation, support for employee preparedness, and financial strategies. The advocacy and outreach actions include plans to advocate for state and federal support and to share what we learn with our community and other governments in our region. An internal accountability structure to ensure action happens, as well as targets and metrics to measure whether those targets have been met, will be essential. We will take leadership actions that move us toward carbon neutrality, from reducing employee commutes through telework to keeping our climate goals in mind as we develop budgets, create plans, and develop our vision. Agencies will also need technical resources, from grant writers or grant writing training to on-call consultants and fellows, to be successful.



To best serve the community, our employees need to be safe from climate shocks and have resources to support their mental health. To act consistently and have the funds we will need, we must ensure our financial investments support climate-healthy actions and come up with innovative approaches to fund our climate actions and support resilience.

## CLIMATE LEADERSHIP AND GOVERNANCE MEASURES

### Advocacy and Outreach

CLG 1: Legislative Advocacy

CLG 2: External Sharing

CLG 3: Public Outreach

### Plan Implementation

CLG 4: Visions and Strategic Plans

CLG 5: Implementation Structures

CLG 6: Implementation Resources

CLG 7: Targets

### Employee Preparedness

CLG 8: Supporting Remote Work

CLG 9: Employee Safety

CLG 10: Equipping Employees for  
Climate Response

### Financial Strategy

CLG 11: Investments

CLG 12: Funding Approaches

## How We Will Implement and Evaluate the Plan

This plan was designed to function as a flexible map, not a checklist. While key implementing agencies are listed for each submeasure or action, we expect that County divisions will prioritize which actions they tackle based on their circumstances, needs, funds, and scope. We also expect that not all actions in this plan will move forward. Agencies are welcome to develop different or additional actions to achieve the measure goals and overall targets.

Project and action area teams will establish and track metrics to understand how and whether the measure goals are being met. We are committed to accountability and transparency and will provide annual updates to the Board of Supervisors and the public.

## Conclusion

This Climate Action Plan for Government Services and Operations represents an expanded definition of climate action, one that includes sustainable prosperity within our community, a foundational goal of advancing equity, and preparedness and response activities to protect our residents from the harms caused by climate change. The shorter timeframe of this plan allows the County to be nimble and shift our prioritized actions, while keeping ambitious goals and this robust understanding of climate action.

Hundreds of County staff members and thousands of community members contributed ideas, goals, and thoughtful review to this plan. Together, this plan and others in the region will help keep our community safe and contribute to national and global carbon reduction goals to slow the progress of our changing climate. We look forward to making this plan a reality, in partnership with all of you.



# Message From the Alameda County Board of Supervisors

Alameda County’s mission is to enrich the lives of our residents through visionary policies and accessible, responsive, and effective services. Climate change threatens the quality of life, health, and economic vitality of our community. Recognizing these connections and our responsibility as both a local government and a large organization, in 2010 Alameda County adopted our first Climate Action Plan for Government Services and Operations.

In 2019, our Board of Supervisors declared a climate emergency, recognizing the need for increased mobilization of resources and labor to halt, reverse, and prepare for the consequences of climate change. We must invest now for our future. The Alameda County Climate Action Plan for Government Services and Operations Through 2026 identifies priority actions that align with our mission and the activities of our County agencies. While focused on County operations and services, the plan benefits residents and directly reaches our residents and community at the point of service delivery.

The plan was developed through a multi-stage process that included community and employee input at each stage. We have learned from over a decade of climate leadership that by working with our partners, we can develop creative solutions that improve quality of life for County residents.

Guided by this plan, we will invest in resilient service delivery and aggressively pursue emissions reductions in the County’s operations. We look forward to continuing to support and collaborate with the communities and groups already being affected by climate change. Thousands of communities across the country are taking action, and we are proud to join them.

*Nate Miley*  
**Nate Miley**  
President of the Board



**David Haubert**  
District 1 Supervisor  
Vice President



**Richard Valle**  
District 2 Supervisor  
In memoriam



**Lena Tam**  
District 3 Supervisor



**Nate Miley**  
District 4 Supervisor  
President



**Keith Carson**  
District 5 Supervisor



**Susan S. Muranishi**  
County  
Administrator

County Mission: To enrich the lives of Alameda County residents through visionary policies and accessible, responsive, and effective services.

County Vision: Alameda County is recognized as one of the best counties in which to live, work, and do business.

# Plan Overview

**SECTIONS**

- Our Climate Challenge**
- Goals and Principles**
- Plan Development**
- Implementation**
- Guide to the Report**



This section provides an overview of how and why the plan was developed and how we will implement it.

# Our Climate Challenge



## Orientation

Climate change is a pressing problem that requires action. Alameda County communities have experienced more wildfires, smoke, heat waves, flooding, and other impacts related to increased global temperatures. From blocked roads to health issues, the population we serve as well as our workforce has been and will continue to be harmed by climate change. Alameda County residents and leaders support climate action. Since 2006, the Alameda County Board of Supervisors has regularly called on County agencies to reduce greenhouse gas emissions and prepare to respond and adapt to this climate emergency.

Building on the successful work of the County's last plan, this Climate Action Plan for Government Operations and Services Through 2026—**affectionately known as the GOCAP**—was developed with goals and principles informed by the County's Vision 2026, state targets, and our own inventories and assessments. We set goals, such as a climate neutrality target, that will make a meaningful difference.

The GOCAP identifies specific actions for reducing the greenhouse gas emissions that County government causes while providing services to residents and through our own operations, such as rightsizing the building portfolio, electrifying buildings and the fleet, and procuring sustainable products and services. The GOCAP identifies actions to prepare and adapt County services and operations for the impacts of climate change. These actions are solely for the County's operations. Cities and unincorporated areas have their own comprehensive climate plans that address areas including residential and commercial energy and water conservation, public transit, and land use.

The plan focuses on actions that need to be taken between 2023 and 2026. It is a roadmap that will evolve over time, not a detailed implementation plan. Additional planning will be needed to successfully launch new programs.



The Plan Overview outlines the steps we took to create the GOCAP. We encourage readers to use the Plan Overview in their own way, by clicking on sections to jump to them.

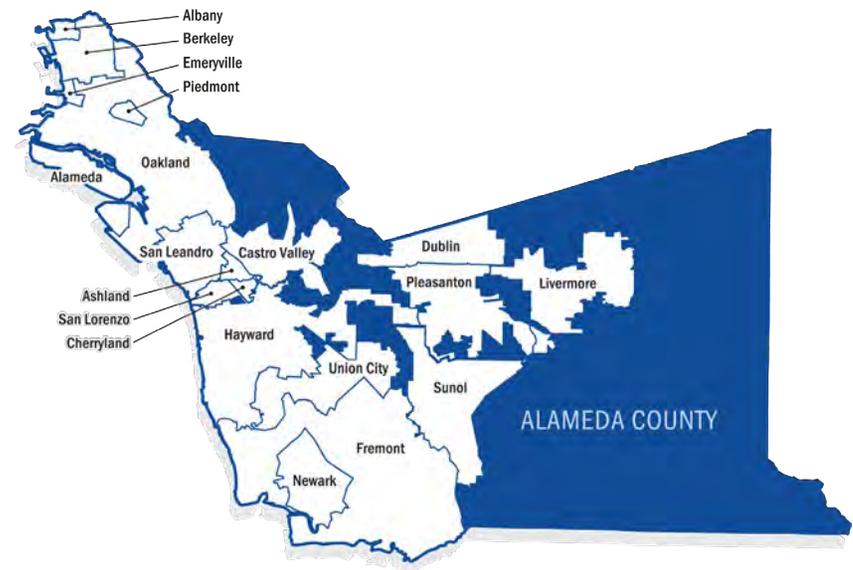
- Community members who gave input on the plan may want to check out the [Plan Development](#) section to see how their input fit into the plan development process.
- County staff implementing the plan may find the [Implementation](#) section particularly helpful, as well as the County climate policies.
- County executives may be interested in alignment with Vision 2026, in the [Goals and Principles](#) section.
- City and county sustainability offices may wish to review [Plan Development](#) as well as inventory information in [Goals and Principles](#).

Following the Plan Overview, six action area sections describe the actions we will undertake. Readers can focus on the sections that interest them most.

## Alameda County: About Us

Alameda County is in Northern California and spans from the San Francisco Bay in the west to the East Bay hills and fertile agricultural land in the east. Alameda County is in the traditional tribal territory of the Chochenyo-speaking Ohlone peoples.

Established in 1853, Alameda is the seventh-most populous county in California, with 14 incorporated cities and several unincorporated communities. Over 1.6 million people call Alameda County home, whether in large urban centers, smaller cities, suburbs, or rural communities. The County contains a varied geography, with residents enjoying active downtowns, coastal marinas, rolling open spaces, vineyards, and lakes.



Alameda County is known for our rich diversity in culture, commerce, and ethnic backgrounds. Residents speak more than 43 languages. Employers range from small businesses and community-based organizations to large organizations such as Kaiser Permanente, PeopleSoft, Safeway, Tesla, and the University of California, Berkeley. As a local government, the County of Alameda employs nearly 10,000 people working in 21 different agencies and departments, making us one of the largest employers in the region. *Forbes* named Alameda County one of America's Best Employers in 2022, ranking us 14th of California's companies and organizations with at least 500 employees.<sup>1</sup>

The County provides a wide range of crucial services to residents, from elections to social services, to restaurant inspections to libraries. The County spends, under the guidance of the Board of Supervisors, \$3.1 billion annually to assist vulnerable residents, enforce the law, ensure justice, protect public health, and improve our quality of life. The Alameda County Government Operations and Services Climate Action Plan (GOCAP) identifies climate actions to both reduce emissions and to protect the County's facilities, employees, and critical service provision functions.

In this document, "County" as an adjective refers to the organization (e.g., County employees) and "county" as an adjective refers to the geographic area (e.g., county boundaries).

<sup>1</sup> Yolanda Baruch, *Forbes*, "America's Best Employers by State," accessed 19 October 2022, <https://www.forbes.com/lists/best-employers-by-state/?sh=6cc1c01f1983>.

## Climate Change: Prevention and Preparation

Burning fossil fuels, including coal and oil, has increased the concentration of atmospheric carbon dioxide. Carbon dioxide is the primary greenhouse gas emitted by human activity. Land clearing for agriculture, industry, and other human activities has also reduced vegetation's and soil's ability to absorb carbon dioxide. Carbon dioxide and other human-made emissions in our atmosphere are trapping heat and slowing heat loss to space. In its Sixth Assessment Report, the [Intergovernmental Panel on Climate Change \(IPCC\)](#), composed of scientific experts from all over the world, concluded it is unequivocal that human actions have warmed the atmosphere, land, and ocean at an unprecedented scale.

Alameda County is experiencing the effects of climate change. Wildfires, blankets of smoky air, unprecedented heat, drought, and flooding are harming residents, employees, local ecosystems, and wildlife. Climate change is a threat multiplier. To tackle challenges like hunger, mental health, and jobs, we need to tackle climate change.

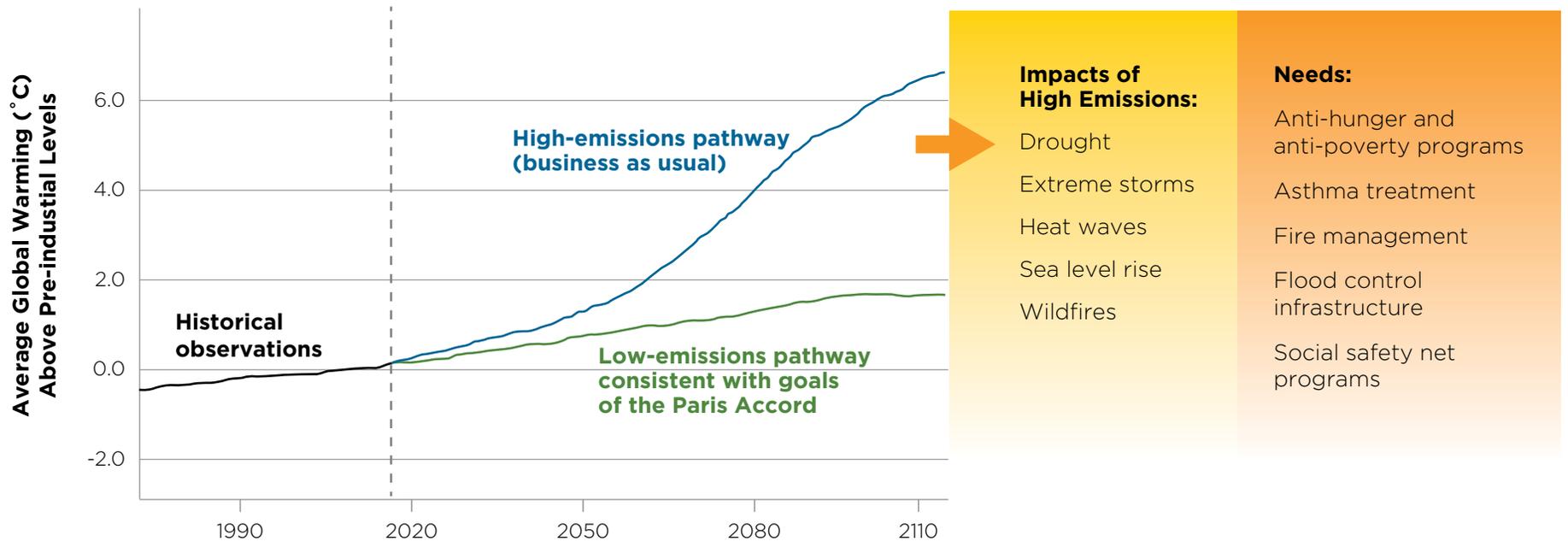
The IPCC found that urgent action is needed to limit global warming to 1.5° C and prevent the worst effects of climate change. Limiting human-induced global warming to this level will require reaching at least net-zero carbon dioxide emissions, along with strong reductions in other greenhouse gas emissions. Even if the global community limits warming to this level, human life, safety, and livelihoods—as well as sensitive plant and animal habitats—across the country will be at risk, especially in coastal areas such as Alameda County.<sup>2</sup> As shown in Figure 1, global warming of more than 1.5° C above pre-industrial levels will have significant consequences locally and globally. Even temporarily exceeding a global warming level of 1.5°C will result in additional severe impacts, some of which will be irreversible.



<sup>2</sup> “Sixth Assessment Report: Impacts, Adaptation and Vulnerability, Fact Sheet – North America – Climate Change Impacts and Risks,” IPCC Working Group II, 2022, [https://www.ipcc.ch/report/ar6/wg2/downloads/outreach/IPCC\\_AR6\\_WGII\\_FactSheet\\_NorthAmerica.pdf](https://www.ipcc.ch/report/ar6/wg2/downloads/outreach/IPCC_AR6_WGII_FactSheet_NorthAmerica.pdf).

**Figure 1:** The high-emissions pathway will require additional County services.

Chart adapted from [https://resources.ca.gov/CNRALegacyFiles/docs/climate/ab2800/AB2800\\_ES\\_FINAL.pdf](https://resources.ca.gov/CNRALegacyFiles/docs/climate/ab2800/AB2800_ES_FINAL.pdf).



California’s [Fourth Climate Change Assessment](#) projects that by the year 2100, average maximum daily temperature will increase by 5.6°F to 8.8°F and heat waves could cause two to three times more heat-related deaths. Water from snowpack is projected to decrease by two-thirds. Triple the miles of highway will be susceptible to coastal flooding in a 100-year storm event, while the odds of large storm events will continue to exponentially increase.

In September 2022, an [assessment published in Science](#) came to the concerning conclusion that even a 1.5°C increase in global temperature could trigger several tipping points when changes in a large part of the climate become self-perpetuating. To prevent this, we need [positive social tipping points](#) to accelerate emissions reductions. Social tipping points reflected in this plan include nonfossil fuel energy generation, carbon-neutral buildings, divestment from assets linked to fossil fuels, disclosure of greenhouse gas emission information, and strengthening of climate education and engagement.



Alameda County Juvenile Justice Center artwork by Miranda Bergman, part of the Alameda County Art Collection. Photo: Sibila Savage.

We must act swiftly and boldly to curb climate emissions for the well-being of both County residents and the global community. The IPCC found that global greenhouse gas emissions would have to peak before 2025 at the latest.<sup>3</sup> The time to act is now.

We also need to prepare for impacts that are occurring and will continue to occur even if global average temperature rise is limited to 1.5°C. California has set out to address these dual goals with the [California Climate Adaptation Strategy](#) and Executive Order B-55-18 and AB 1279, which set and codified a goal of achieving carbon neutrality—net-zero carbon emissions achieved by reducing emissions and offsetting remaining emissions—no later than 2045. Similarly, the Alameda County GOCAP identifies climate actions to both reduce emissions and to protect the County’s facilities, departments, employees, and critical service provision functions.

<sup>3</sup> “Climate Change 2022: Mitigation of Climate Change,” IPCC Working Group III, 2022, [https://www.ipcc.ch/report/ar6/wg3/downloads/report/IPCC\\_AR6\\_WGIII\\_FullReport.pdf](https://www.ipcc.ch/report/ar6/wg3/downloads/report/IPCC_AR6_WGIII_FullReport.pdf).

## County Climate Policies for Government Services and Operations

The Board of Supervisors has a long history of recognizing the threats represented by a changing climate to the health and well-being of our community and the world. Resolutions broadly addressing climate action in government services and operations are noted below and can be found on [our policies webpage](#).

### **2006 Resolution Establishing County Climate Change Leadership Strategy (R-2006-204)**

This resolution directed County staff to assess the County's climate footprint and implement a plan to mitigate those emissions, for County government and unincorporated areas

### **2007 Resolution to Sign U.S. Cool Counties Climate Stabilization Declaration (R-2007-366)**

Alameda County joined counties nationwide to urge the federal government to take bold action to stop climate change. The County committed to work with local, state, and federal partners to reduce emissions from the geographical county 80 percent below current levels by 2050.

### **2010 Resolution Adopting Commitments to Climate Protection, Climate Action Plan, and Greenhouse Gas Emissions Reduction Targets for Government Services and Operations (R-2010-170)**

The *Alameda County Climate Action Plan for Government Services and Operations* provided a comprehensive blueprint to achieve at least 15 percent greenhouse gas emissions reductions by 2020 and make County services more efficient. Fulfilling the commitments made in the 2006 and 2007 climate resolutions, this resolution adopted the plan, 16 Commitments to Climate Protection, and short-term and long-term greenhouse gas emissions reduction targets for government services and operations.

### **2012 Resolution Adopting Climate Action Principles (R-2012-368)**

Cross-agency teams developed programs and principles to implement a set of climate plan actions requiring cross-agency coordination. This resolution lays out key approaches that agencies are instructed to undertake to support these initiatives.

**2017 Resolution to Reaffirm Alameda County's Climate Action Commitments and Support the Paris Climate Agreement (R-2017-185)**

Alameda County pledged support for the goals of the [Paris Agreement](#) after the federal government's decision to withdraw from that historic accord (which the United States has since rejoined). The County committed to assess and plan for impacts of climate change.

**2019 Resolution Endorsing the Declaration of a Climate Emergency (R-2019-375)**

Alameda County reaffirmed our commitment to climate change mitigation and adaptation, with priority to supporting the most vulnerable communities. We committed to set new carbon reduction targets, invest in resilient service delivery, leverage regional collaboration, and consider how the County can support a just transition to a carbon-free economy.

**2020 Adoption of 2021-22 Legislative Platform**

The most recent legislative platform continues support for policies that reduce greenhouse gas emissions and prepare the region to adapt to impacts of climate change. Areas addressed include clean energy and transportation, climate emergency preparedness, climate risk financial transparency, energy efficiency and building upgrades, local agriculture production, promotion of a circular economy, and regional climate action and adaptation.

The Climate Emergency Declaration committed the County to “aggressively pursue emissions reduction strategies” and to “put into effect priority programs and projects to support resilience efforts within our most vulnerable communities.” We act in the context of bold goals set by California and the federal government in coordination with global partners. We act as a part of a network of local jurisdictions across the state, country, and world.

# Goals and Principles



## GOCAP Guiding Principles

An early step in plan development was to draft foundational principles, guided by continuity with the climate action approach to date and County priorities such as Vision 2026. The principles relate to the scope of County services and operations. They were selected to highlight the foundational ideas that frame our current definition of climate action at the County, which advances and builds on the definition reflected in our 2010 plan to add new priorities, such as prioritizing community prosperity, integrating racial equity, and centering those most harmed by climate change impacts. County staff, agency leadership, and community members gave feedback on the draft principles. These principles assisted us to ground action development in a comprehensive frame of our guiding ideas, and will frame

future climate action planning efforts beyond the GOCAP.

- **Implement and share bold climate action strategies**

The IPCC's findings and the ambitious carbon neutrality targets set by California highlight the need for bold action. Institutional change can be slow, but given the urgency we must move boldly and swiftly whenever possible. Bold action includes both mitigation and adaptation.

- **Use a cross-agency, whole-of-government approach**

The COVID-19 pandemic illustrated the importance of a whole-of-government approach that emphasizes collaboration across our diverse agencies. The climate emergency calls all agencies to action and requires regional coordination and sharing.

- **Reimagine operations and services to increase efficiency, equity, and access**

Providing service is at the heart of our function as a County. Reimagining ways to serve our community efficiently will lead to financial and sustainability benefits. Equity and accessibility translate to reaching more clients, maximizing the well-being and resilience capacity of our community, and lessening the need for emergency support.

- **Prioritize the health, well-being, and voices of communities affected most by climate impacts**

Our mission is to support all community members within the County. As set out in the County’s Climate Emergency Declaration (R-2019-375), prioritizing frontline communities, those who will be first and most affected, will focus our efforts and ensure that all are served equitably. Making their voices central in leadership and advising on measure implementation will help ensure our services are focused where, when, and how they will be most effective.

- **Advance sustainable prosperity for all**

Before and during the pandemic, Alameda County residents faced challenging economic times. Just as educational and health access, community safety, economic opportunity, and social cohesion are social determinants of health, these same factors are social determinants of resilience. Communities are better able to weather adverse impacts and to bounce back if they are well-resourced. For this reason, investing in community prosperity that is sustainable—both long-lasting and environmentally beneficial—will reduce the need for social safety net services and reap dividends in health and adaptability.

The County’s 2022 definition of climate action encompasses a strong new vision for a sustainable and resilient County community. This definition is woven throughout the GOCAP’s measures to help us engage in bold, coordinated, imaginative, inclusive, and holistic climate action.

## Vision 2026

Alameda County’s [Vision 2026](#), adopted in 2018, guides all County work with our vision for the future, goals, and guiding principles through 2026. It includes four vision elements: Healthy Environment, Safe and Livable Communities, Thriving and Resilient Population, and Prosperous and Vibrant Economy.

To achieve these four elements, six ambitious “10X” goals were set to inspire creative action and new approaches: Eliminate Homelessness, Healthcare for All, Employment for All, Eliminate Poverty and Hunger, Crime Free County, and Accessible Infrastructure. 10X goals refer to ambitious goals that require thinking in a different way to achieve transformative, not incremental, improvements. Under each of the 10X goals are three to seven goals, each with several objectives.

Eliminate Homelessness objectives include increasing the availability of quality and affordable housing. Healthcare for All objectives include ensuring effective health and medical response in disasters. Employment for All objectives include

implementing best practices for recruitment and retention. Crime Free County objectives include providing employment opportunities for residents who have been justice-involved and enhancing volunteer response to emergencies. Accessible Infrastructure objectives include supporting access to County services from anywhere at any time and on any device and adopting intelligent building technologies to efficiently use resources. Vision 2026 also includes remote work and virtual-first service delivery.

In the six action area sections of this report, we identify how each action area section and submeasure align with Vision 2026.



## Alignment by Action Area

We identified key areas of alignment between each GOCAP action area section and overarching Vision 2026 elements and Vision 2026 10X goals, as shown in the following chart. (See Guide to the Report for a summary of each action area section.)

GOCAP Section	Vision 2026 Elements				Vision 2026 10x Goals					
	Healthy Environment	Safe and Livable Communities	Thriving and Resilient Population	Prosperous and Vibrant Economy	Eliminate Homelessness	Healthcare for All	Employment for All	Eliminate Poverty and Hunger	Crime Free County	Accessible Infrastructure
<b>Built Environment</b>	Dark	Dark								Dark
<b>Community Resilience</b>		Dark	Dark			Dark		Light	Light	Light
<b>Green Economy and Prosperity</b>	Light	Dark	Dark	Dark			Dark	Light	Light	
<b>Sustainable Materials Management</b>	Dark			Dark			Light	Light		Dark
<b>Transportation</b>	Dark					Light				Dark
<b>Climate Leadership and Governance</b>	Light		Dark	Dark		Dark				Light

 Dark squares indicate **six to 11 measures aligned** with the Vision 2026 element or 10X goal or general alignment across a section. Where vision elements occurred across a section, they may not have been listed individually for each measure but are mentioned in the section introduction.

 Light squares indicate **two to five measures in the action area aligned** with the Vision 2026 element or 10X goal.

## Vision 2026 and United Nations Sustainable Development Goals

Climate action requires moving out of “[carbon tunnel vision](#)” by considering not only reduction of greenhouse gas emissions but also broader sustainable development goals of human and ecological health and well-being.

All United Nations member states adopted the [United Nations Sustainable Development Goals](#) in 2015. These goals recognize that ending poverty will come about through strategies that improve health and education, reduce inequality, and spur economic growth while tackling climate change and working to preserve our oceans and forests. We looked at alignment between Vision 2026 and the 17 Sustainable Development Goals at the subgoal level. As highlighted in the following chart, we found alignments with all Sustainable Development Goals except for 14: Life Below Water and 17: Partnerships for the Goals.

Vision 2026 Goal	United Nations Sustainable Development Goal
<b>Eliminate Homelessness</b>	11: Sustainable Cities and Communities 15: Life on Land
<b>Healthcare for All</b>	3: Good Health and Well-Being 6: Clean Water and Sanitation 11: Sustainable Cities and Communities 12: Responsible Consumption and Production
<b>Employment for All</b>	4: Quality Education 8: Decent Work and Economic Growth 10: Reduced Inequalities
<b>Eliminate Poverty and Hunger</b>	1: No Poverty 2: Zero Hunger
<b>Crime Free County</b>	1: No Poverty 5: Gender Equality 10: Reduced Inequalities 13: Climate Action 16: Peace, Justice and Strong Institutions
<b>Accessible Infrastructure</b>	7: Affordable and Clean Energy 9: Industry, Innovation and Infrastructure 11: Sustainable Cities and Communities 13: Climate Action

Vision 2026’s goals for community well-being, safety, and prosperity remain highly relevant locally and harmonize with global efforts.

## Overarching Targets

Climate action plans must have clear goals to be successful. Historically, such plans have set a greenhouse gas emissions reduction target as their primary goal. As climate change impacts started being visible in communities, climate plan goals expanded to include preparedness and resilience.

We have aligned our operational greenhouse gas emissions reductions target with California's climate neutrality target, have identified the greatest supply chain opportunities, and are exploring resilience metrics.

### Past Greenhouse Gas Reduction Targets

The Climate Action Plan for Government Operations and Services Through 2020 (R-2010-170) defined the pathway for achieving a minimum 15 percent reduction in greenhouse gas emissions, with a stretch target of 30 percent reduction, by 2020 from a 2003 baseline. The plan also set a long-term target of 80 percent reduction in County emissions by 2050. These targets aligned with California state targets at the time and represented strong commitments for change.

The County greatly exceeded the 2020 target, achieving a 31 percent reduction in operational emissions, as measured by the 2019 greenhouse gas emissions inventory for government operations. We are on track to achieve the 80 percent reduction target by 2050.

### New Climate Neutrality Target

Bold action is required on a global scale to avert the worst impacts of climate change. The IPCC 2022 Sixth Assessment Report<sup>4</sup> indicates that the global community has less than a decade to transform our economies away from fossil fuels to



<sup>4</sup> "Synthesis Report of the Sixth Assessment Report," Intergovernmental Panel on Climate Change, accessed 21 July 2022, <https://www.ipcc.ch/ar6-syr>.

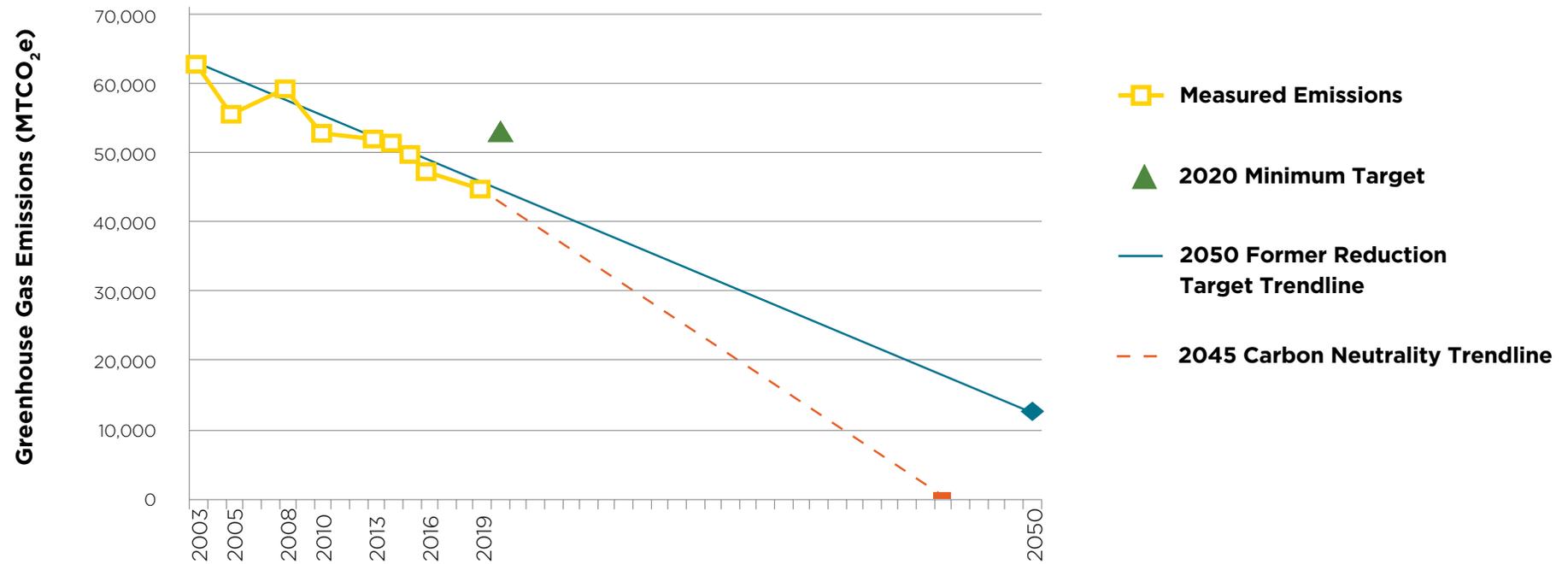
prevent the worst effects of a warming planet. The Board acknowledged these growing threats in the Climate Emergency Declaration (R-2019-375), stating the climate emergency “demands mobilization on a massive scale to halt, reverse, and address the causes and consequences of global warming” and committing the County to “set new carbon reduction targets, aggressively pursue emission reduction strategies in its own operations and invest in resilient service delivery.”

California has positioned itself as a global leader in climate policy, setting an economy-wide carbon neutrality goal by 2045. Achieving carbon neutrality, or net-zero emissions, will require greatly reducing emissions and offsetting remaining emissions. The California Air Resources Board's [2022 Scoping Plan for Achieving Carbon Neutrality](#) lays out a blueprint for achieving carbon neutrality by 2045. The proposed approach is to reduce greenhouse gas emissions statewide by 85 percent below 1990 levels and rely on natural and emerging carbon capture technologies to achieve carbon neutrality. Alameda County has set our target to align with the State's carbon neutrality goal. We will aim to achieve carbon neutrality in our County operations by 2045 through ambitious carbon reduction efforts and other strategies. If the state target changes, we will explore updating our target.

Figure 2 shows the relationship between the County's historical emission reduction targets and the new climate neutrality target. The red line tracks greenhouse gas emission inventories from 2003 to 2019. The green triangle represents the last plan's minimum target of 15 percent reduction by 2020. The blue line represents the reductions needed to achieve the goal set in 2010 of 80 percent reduction in operational emissions (from 2003 levels) by 2050. The purple line indicates the reductions needed to achieve the new target of carbon neutrality in our operations by 2045.

The Board of Supervisors declared a climate emergency in 2019, committing the County to aggressively reduce emissions and invest in resilient service delivery.

**Figure 2: Greenhouse gas emission inventories and targets over time**



### Key Next Steps to Move Toward Climate Neutrality Target

The GOCAP sets the County on an ambitious reductions path toward a goal of carbon neutrality by 2045. Figure 3 shows the sources of greenhouse gas emissions by inventory scope (referring to level of direct control the County has over the emission sources) for three inventory years (2003, 2010, and 2019) and identifies key actions the County must take to achieve this bold target, including:

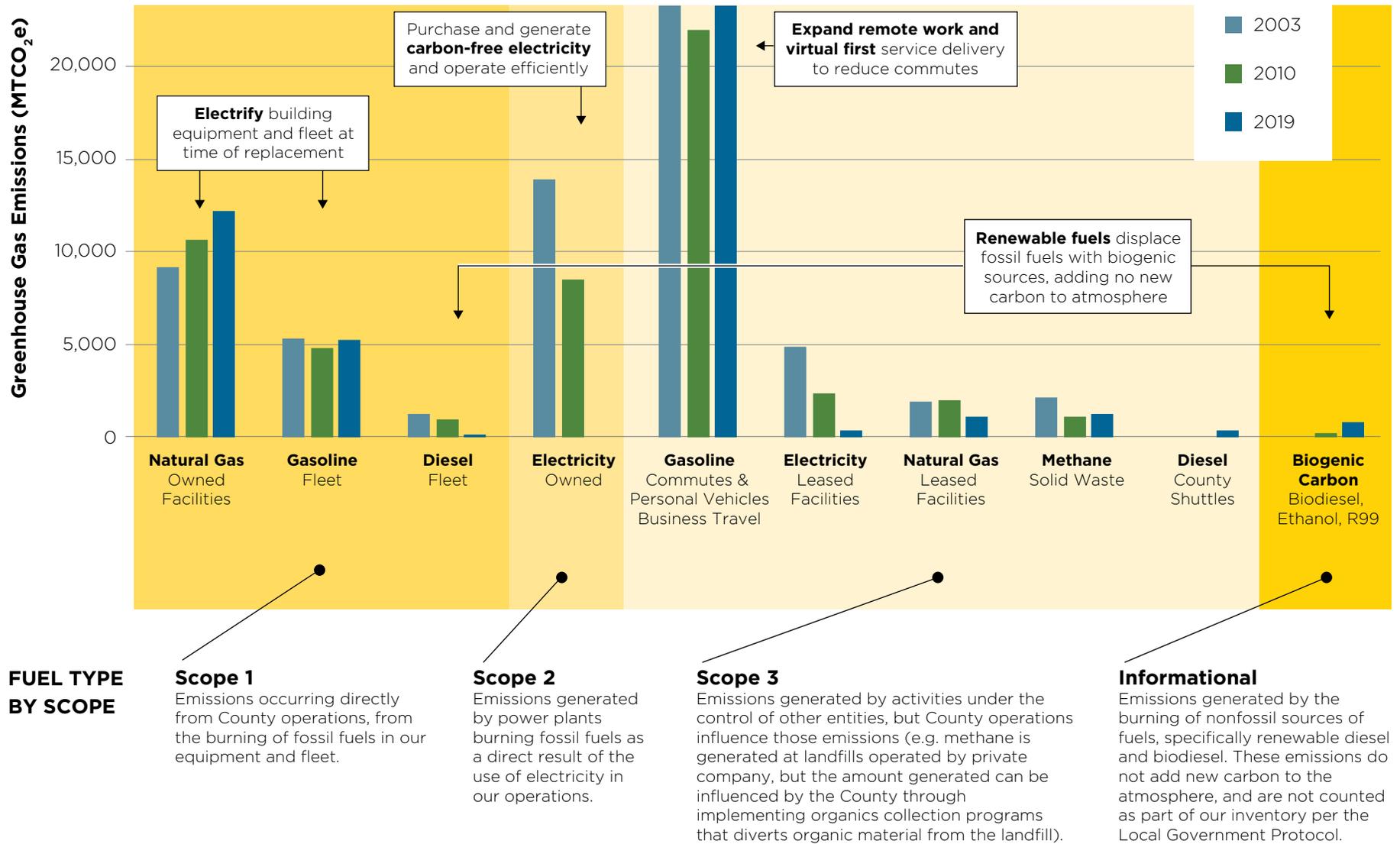
- Expanding mobile work and virtual-first service delivery, which reduces the need for employees and County clients to commute to work or to receive services.
- Rightsizing the building portfolio to consolidate into our more energy-efficient facilities. For certain County functions, work will no longer be a place we go, but something we do from anywhere on any device.

- Electrifying building equipment. Ninety-nine percent of emissions from our owned office space comes from natural gas-fired equipment used to heat buildings and water, provide refrigeration and cooling equipment, cook, and dry clothes. Thoughtful planning is required to ensure a cost-effective transition when equipment requires replacement, as many of the County's facilities are over 30 years old and may need extensive electrical upgrades.
- Electrifying the vehicle fleet to accrue the emissions reductions benefit of carbon-free energy sources. As of July 2022, the County has over 80 electric vehicles and nearly 200 hybrid-electric vehicles in our fleet, and over 100 charging stations, including one Direct Current fast charger, at County facilities. Further electrifying the fleet in advance of the State's ban on internal combustion engine sales in 2035 will ensure our continued leadership in advancing green fleet technology and ensure we are cost effectively preparing with a next-generation fleet.
- Continuing to purchase carbon-free renewable electricity from the local power provider.
- Continuing to use renewable fuel sources, such as renewable diesel, for vehicles in our fleet that do not yet have viable electric alternatives. The County's switch to use of R99 (renewable diesel) in 2015 significantly reduced the fossil fuel-based emissions from our diesel-powered vehicles. Unlike conventional fuels that are derived from fossil fuels, biogenic fuels like renewable diesel are made from plant or animal sources, and therefore do not add new carbon emissions into the atmosphere.
- Support development of circular economy practices in County operations by preventing waste generation through increasing reuse and repair efforts, recovering edible food for human consumption, and leveraging our purchasing power to support the procurement of sustainable products and services. The majority of our greenhouse gas reductions from 2003 to 2019 came from switching to carbon-free electricity for our buildings and public infrastructure, showing the importance of policy shifts to create greener options in the market.



*East Bay Community Energy's wind farm in Livermore generates carbon-free electricity for residential, business, and municipal customers throughout Alameda County.*

Figure 3: Greenhouse gas emissions sources by scope (level of control) and key actions to reduce major sources



## Challenge of Supply Chain Targets

The methodology for supply chain assessments uses industry averages to determine supply chain emissions. This means that actions the County takes, such as working with vendors who have reduced their emissions, do not show up as reductions in the supply chain assessment. Because of the difficulty measuring, we are not setting a reductions target for supply chain emissions reductions but will instead measure progress on completing actions that address supply chain emissions.

## Challenge of Resilience Metrics

Resilience metrics are a developing field. California has set out to provide measurable goals for community resilience to local government agencies, but these are not yet in place. While metrics and indices for resilience have been developed for cities and neighborhoods, available frameworks do not focus on outcomes primarily influenced by county government action, so are of limited utility to this plan.

Climate Resilience Measure 3j recommends developing a comprehensive approach to measuring resilience across our engaged agencies. For now, progress can be measured through accomplishment of measures in the Community Resilience section, as well as measures in the Built Environment section, such as Measure 9: Climate Resilience for Building and Infrastructure Portfolio.

A principle that guides the County's work on resilience is the benefit of proactive preparation and planning. According to the National Institute of Building Sciences, mitigation of natural hazards saves six dollars on average per one dollar invested through federal mitigation grants.<sup>5</sup> Taxpayers will benefit in the long run from the preparatory actions included in this GOCAP.

## Resilience Assessments

In 2019, the County undertook a vulnerability assessment using the Environmental Protection Agency's [Multisector Evaluation Tool for Identifying Resilience Opportunities \(METRO\)](#). The METRO tool provides a high-level screening across multiple sectors, programs, and service areas. The vulnerability assessment was a limited-scope research project to build an initial understanding of climate preparation and adaptation within the County government. We wished to learn which climate

---

<sup>5</sup> "Natural Hazard Mitigation Saves Interim Report," Federal Emergency Management Agency, June 2018, [https://www.fema.gov/sites/default/files/2020-07/fema\\_mit-saves-factsheet\\_2018.pdf](https://www.fema.gov/sites/default/files/2020-07/fema_mit-saves-factsheet_2018.pdf).

shocks will most affect our community and which shocks we were least prepared for. The METRO indicators helped assess Alameda County's resilience, as a geographic area, on 160 indicators in eight sectors: Economy, Energy, People (Health), Land Use, Natural Environment, Telecommunications, Transportation, and Water. Some indicators measure vulnerabilities; others measure the presence of strategies or policies. Some indicators we can influence through our services and operations; others are not in our control. The indicators were both qualitative and quantitative. Through available data from County sources and local organizations and interviews with more than 20 staff, we rated each indicator on a scale of 1 to 4 on importance and on resilience. We identified a number of high-priority indicators, meaning they were rated a 3 or 4 in importance and 1 or 2 in existing level of resilience. For example, in the Economy sector, recovery of businesses post-climate hazard was a priority. In the Natural Environment sector, we found opportunity to increase use of native species in green infrastructure. In the People sector, we found a high number of older adults and many days of low air quality. In the Transportation sector, we found bus system delays due to extreme heat. These findings formed a backbone for the development of our resilience actions across the GOCAP.

Throughout the planning process, we found it valuable to review and align with regional, state, federal, and global resilience tools. Benchmarking with the METRO tool from the Environmental Protection Agency is just one example.

The County regularly updates our [Local Hazard Mitigation Plan](#)—required of cities, counties, and special districts under the federal Disaster Mitigation Act as a prerequisite to receiving disaster mitigation funding—to reassess risks caused by the potential for natural disasters. The Local Hazard Mitigation Plan includes a discussion of climate change adaptation and recommendations to minimize risks to our operations, facilities, employees, and the community we serve. These recommendations were considered when developing the GOCAP.

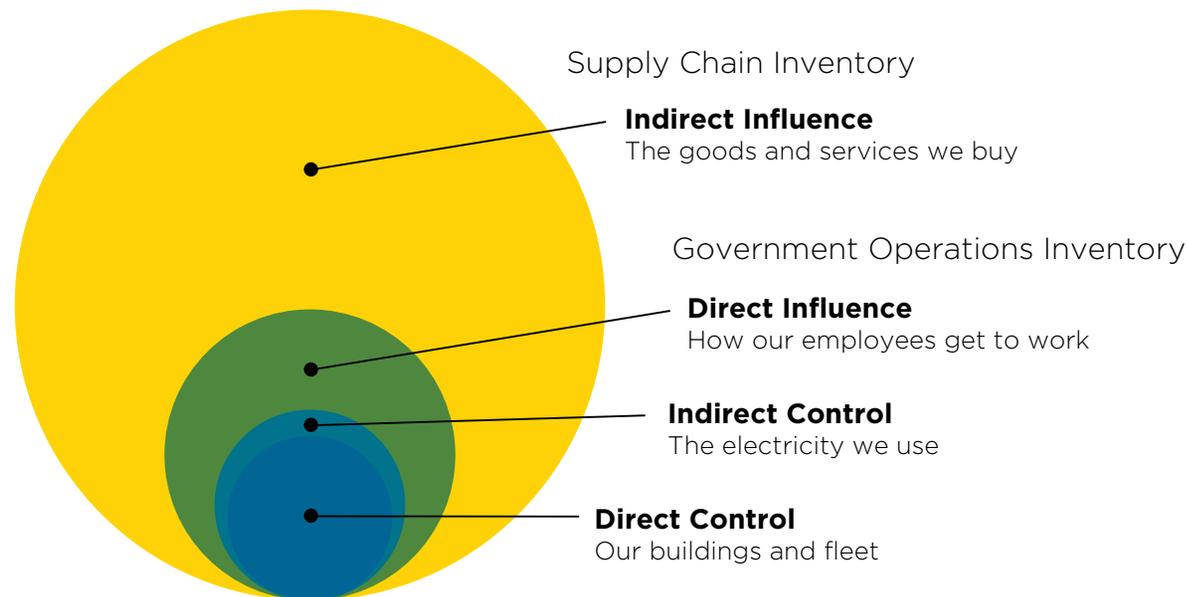
Though the County's assessments and plans that address climate change resilience can direct us to prioritized actions and recommendations, they do not serve to track progress over time.

## Greenhouse Gas Emissions Inventories

Conducting the County's day-to-day business necessarily requires the use of energy and resources. To assess the climate impact of our business operations, the County has measured the greenhouse gas emissions related to our government operations seven times since 2003. Knowing the amount and sources of our greenhouse gas emissions is essential to reducing them.

We have also conducted two supply chain inventories to assess the life cycle environmental impact of the goods, services, and energy the County purchases to determine strategic focus areas for reducing the climate impact of purchasing decisions. In 2019, we found that emissions related to the purchase of goods and services were approximately four times greater than those generated by our operations. The relationship and scale of impact of these two complimentary inventories are shown in Figure 4, with the yellow circle representing the measured supply chain emissions, and the green and blue circles representing emissions sources in our government operations inventory.

**Figure 4: Comparison of level of control or influence on emission sources measured in County inventories**



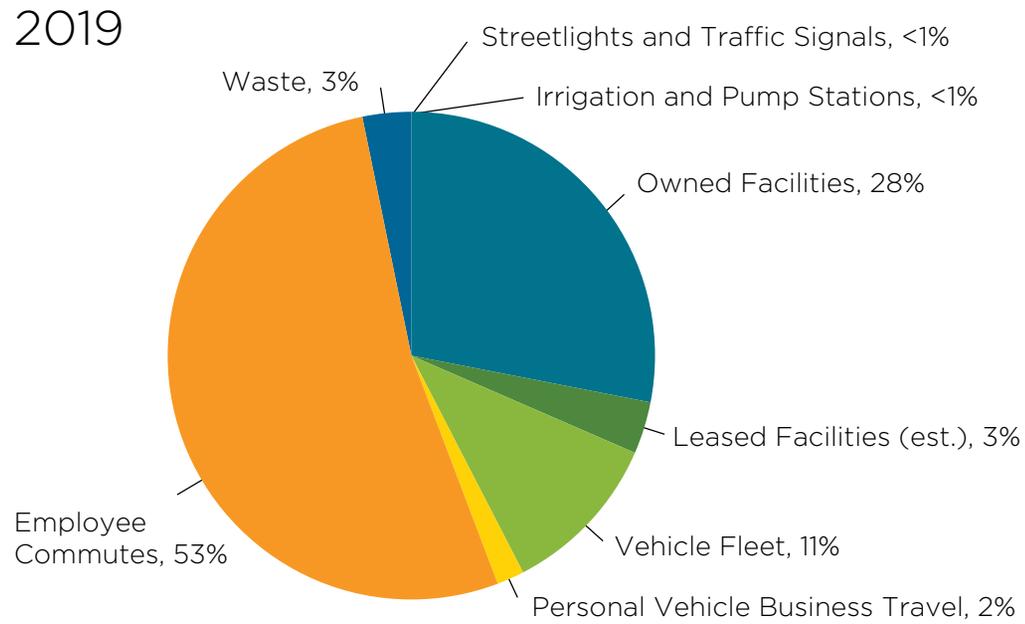
Please note that our government operations inventory and supply chain inventory do not parallel the [Scope 1, 2, and 3 definitions](#) commonly used in greenhouse gas inventory protocols. For instance, we include Scope 3 activities, such as employee commutes and leased building energy use, in the government operations inventory.

## Government Operations

In calendar year 2019, County operations generated approximately 43,372 metric tons of CO<sub>2</sub>e. Figure 5 shows the largest sources of emissions, which were fuel used by employees commuting to work (53 percent), natural gas and electricity used in

our owned and leased facilities (31 percent collectively), and fuel used by the County's fleet vehicles (11 percent). Combined, these sources accounted for 95 percent of total emissions measured in 2019.

**Figure 5: Government operations inventory (2019)**



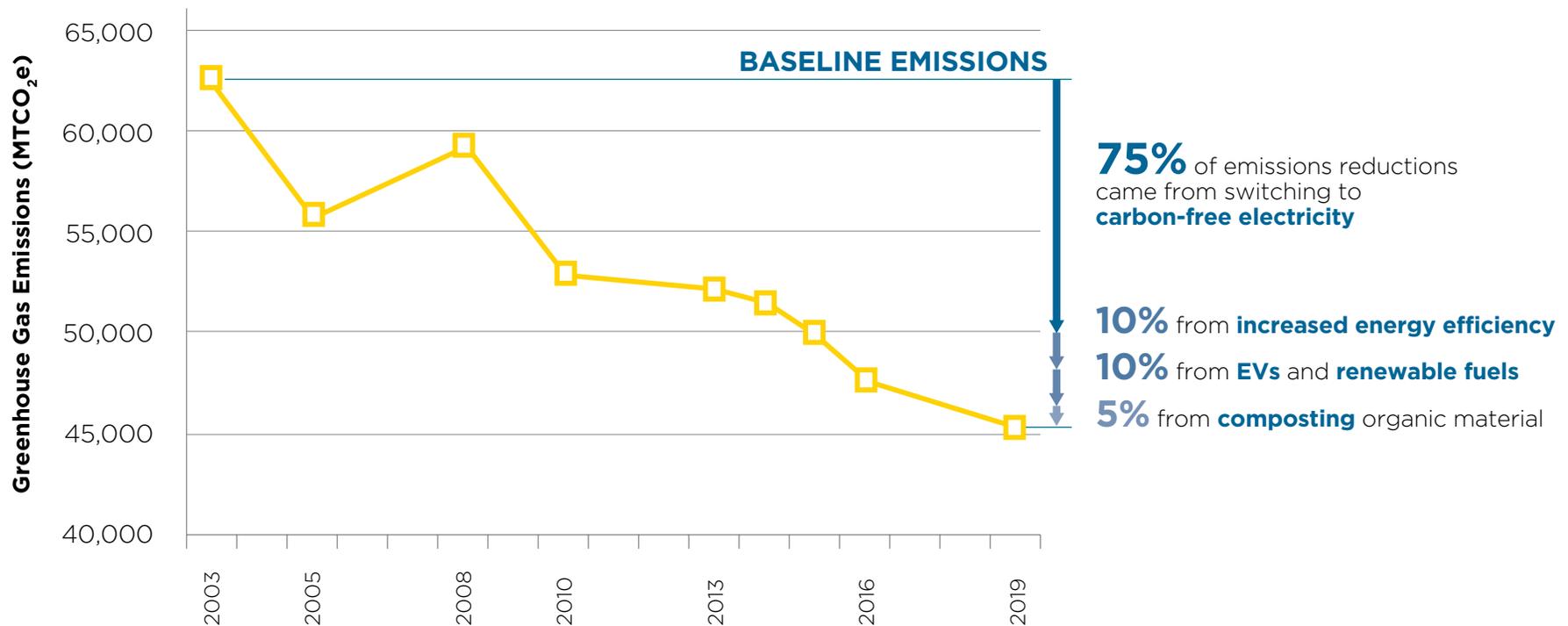
Emissions measured in our government operations inventory have decreased 31 percent since 2003, achieving the stretch target defined in the last plan of 30 percent reduction by 2020.

Comparing 2019 to 2003, the greatest emissions reduction was in the buildings and facilities sector from the procurement of 100-percent carbon-free electricity from East Bay Community Energy, the local power provider formed in 2018 through the leadership of the Alameda County Community Development Agency. In addition, we continued to expand on-site generation of renewable electricity, and in 2019, it contributed 16 percent of our total electricity needs for owned County facilities. Increases in energy efficiency also contributed to emissions reductions.

Employee commutes remained the largest source of emissions in 2019, achieving only a 2 percent reduction in absolute emissions and a 6 percent reduction on a per capita basis when accounting for the increase in employees over time. This can be a challenging area to tackle because it is affected by regional factors, such as the availability of affordable housing options near workplaces. However, telework has greatly increased since 2020 and is a cost-effective approach to emissions reductions. (Some rough estimates for potential greenhouse gas reductions from telework are provided in the Climate Leadership and Governance section under Measure 8.)

Figure 6 shows the major contributors to emissions reductions in 2019, as compared with our 2003 baseline, with about 75 percent of the reductions attributed to the purchase of carbon-free electricity for our buildings and public infrastructure. Energy efficiency, fleet electrification, use of renewable fuels in our vehicle fleet, and increased diversion of waste from landfills also contributed to our emissions reductions.

**Figure 6: Greenhouse gas emission reductions from 2003 baseline**



The below table shows the absolute emissions measured in the 2003 and 2019 emissions inventories broken down by inventory sector.

#### Greenhouse gas emissions by sector comparing baseline year and 2019

Major Sectors	2003 CO <sub>2</sub> e (MT)	2019 CO <sub>2</sub> e (MT)	Difference in Emissions CO <sub>2</sub> e (MT)	Percent Difference
<b>Buildings and facilities</b>				
Owned facilities	21,814	12,176	-9,638	-44%
Leased facilities (est.)	6,728	1,448	-5,280	-78%
<b>Infrastructure</b>				
Streetlights and traffic control	959	0	-959	-100%
Water pumps and irrigation	496	1	-495	-99%
<b>Transportation</b>				
Employee commutes (est.)	23,489	22,973	-516	-2%
Vehicle fleet (county-owned cars and trucks)	6,501	4,753	-1,748	-26%
Personal vehicle business travel (est.)	1,010	789	-221	-22%
<b>Other</b>				
Waste	2,110	1,231	-879	-42%
	<b>Total in 2003: 63,107</b>	<b>Total in 2019: 43,372</b>	<b>Final Difference: -19,736</b>	<b>Final Difference: -31%</b>

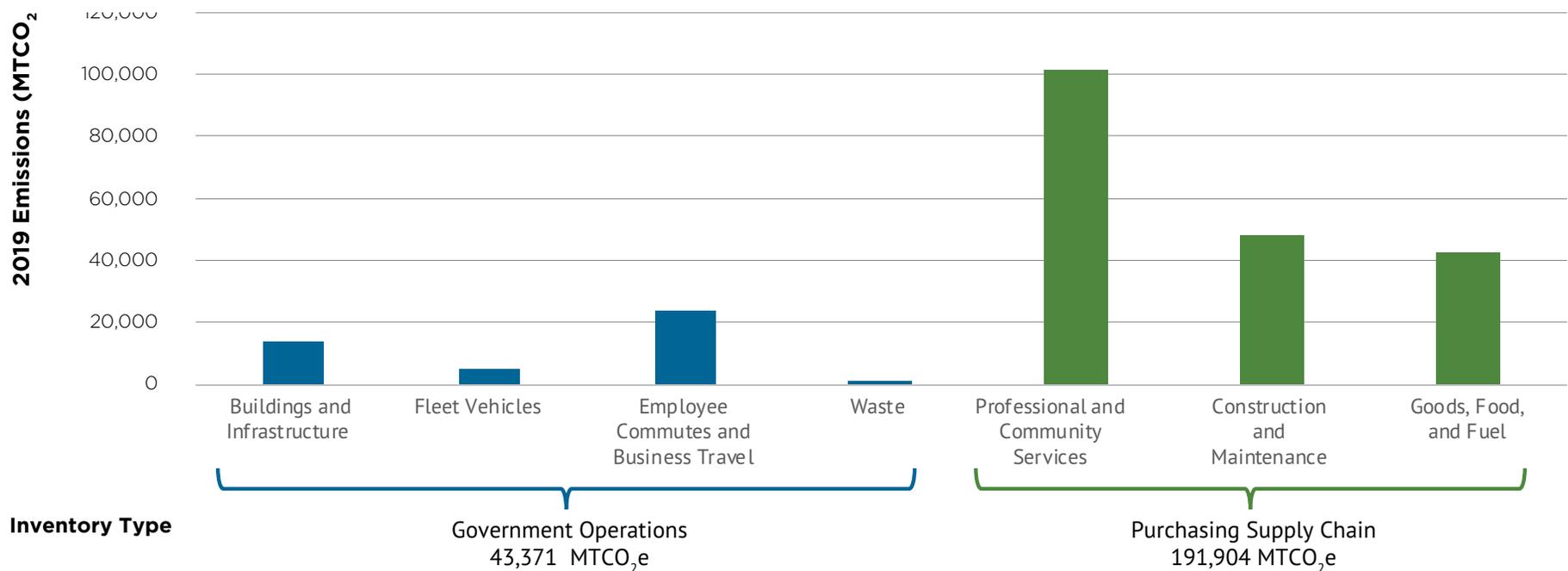
## Supply Chain

Alameda County serves more than 1.6 million residents and plays a significant role in the local economy through annual purchasing to meet operations and services needs. Goods, services, and energy purchased by the County create demand in the supply chain and generate greenhouse gas emissions throughout every stage of the life cycle, including resource extraction, production, transportation, and associated services needed to reach end markets. To better understand where to concentrate our efforts, we conducted a [detailed study of our supply chain](#) to identify the sources of emissions in fiscal year 2015 and updated that analysis for fiscal year 2019. To estimate these emissions, County expenditures were categorized into approximately 200 purchase types, then multiplied by emission intensity factors provided by the U.S. Environmental

Protection Agency.<sup>6</sup> We learned which purchase types had the greatest impact, so we can prioritize strategies with the greatest opportunity to reduce emissions locally and globally.

In 2019, greenhouse gas emissions generated in the supply chain from County expenditures resulted in 191,000 MTCO<sub>2</sub>e. During this same period, emissions generated by County operations and commutes, as calculated in the government operations inventory, were 43,000 MTCO<sub>2</sub>e. The emissions footprint measured in 2019 from the County’s supply chain was four times greater than that of government operations. While the County has less direct control over emissions occurring in the supply chain than we do our own operations, the scale of opportunity to create positive change is significant. Figure 7 shows the comparative scale of emissions by sector of both the government operations inventory and the supply chain emissions inventory to indicate the scale of opportunity by broad sector.

**Figure 7: Comparison of 2019 calendar year government operations inventory and 2019 fiscal year supply chain inventory by sector**



<sup>6</sup> U.S. Environmental Protection Agency’s [U. S. Environmentally-Extended Input-Output \(USEEIO\) data models](#) are the source for impact factors used in this analysis. The models were accessed using [openLCA](#). USEEIO and openLCA are free, publicly available resources, as are all the resources and tools used in this analysis.

In 2019, the largest contributors were professional services, primarily contracts with community-based organizations providing social safety net services (53 percent); construction and maintenance of new and existing structures (25 percent); and office supplies, furniture, equipment, and other goods (13 percent).

Professional and community services accounted for 53 percent of the greenhouse gas emissions from the County's supply chain expenditures in 2019. One subcategory, community-directed services, accounted for 88 percent of the greenhouse gas emissions from this purchasing category, with the remainder coming from business services provided to the County.

Community-directed services are County-sponsored community services for those in need, such as medical, dental, childcare, and community food and housing. Impacts from these services occur directly from service providers' buildings and equipment fuel and electricity use, as well as the impacts from the production of material goods and food they purchase to provide those services. Community-based organizations provide critical services to our community. Their work accounted for roughly 70 percent of the County's budget in 2019. To reduce supply chain emissions, we will need to strengthen existing partnerships with these providers. We will support them to identify ways to reduce their environmental impact, saving money and resources. We will also provide recommendations for resilience to climate disasters, helping them continue their crucial work for our community while the region experiences climate effects. Many of these organizations serve communities who will be disproportionately affected by climate change impacts, so supporting their organizational resilience will also support equity goals.

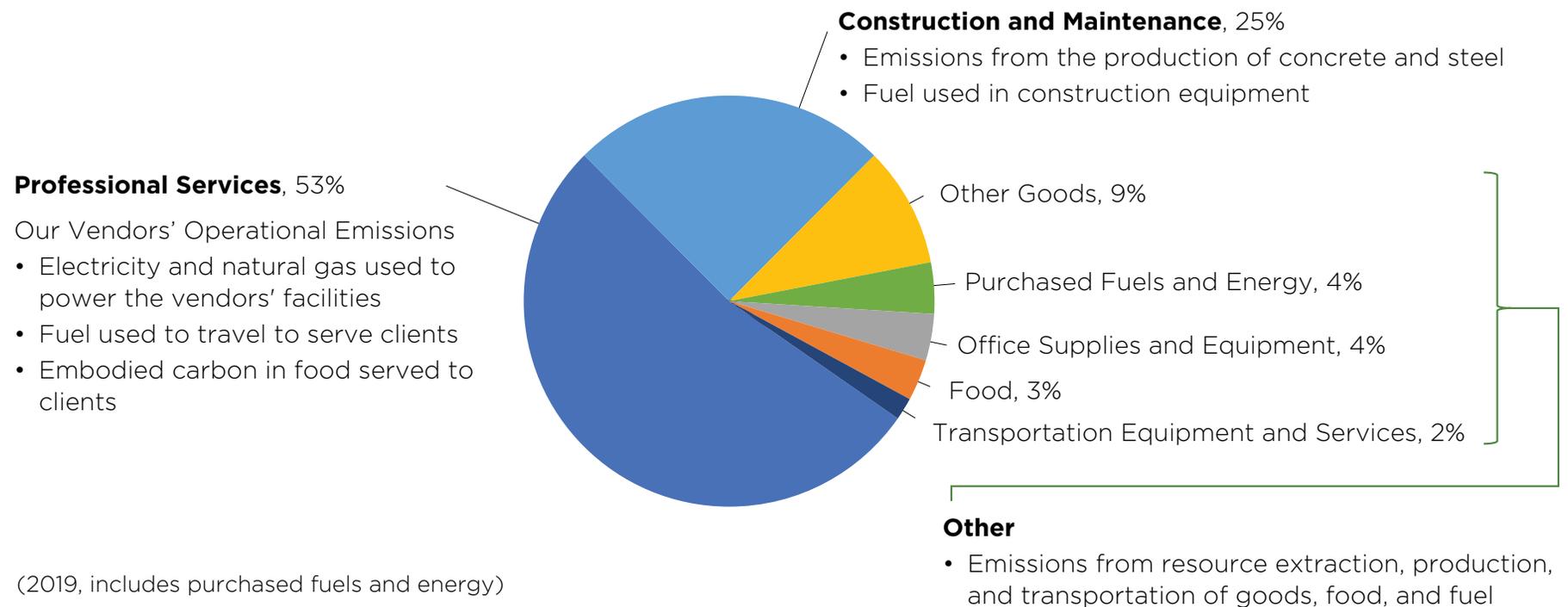
The second-largest supply chain contributor in 2019, construction and maintenance of County facilities and infrastructure, accounted for 25 percent of the emissions measured in this report. New construction caused approximately 80 percent of the greenhouse gas emissions for this category, with the remainder occurring from maintenance. Impacts from goods and services include the direct, local impacts from vehicle and equipment fuel combustion during construction, as well as the greenhouse gas emissions from the production of building materials.



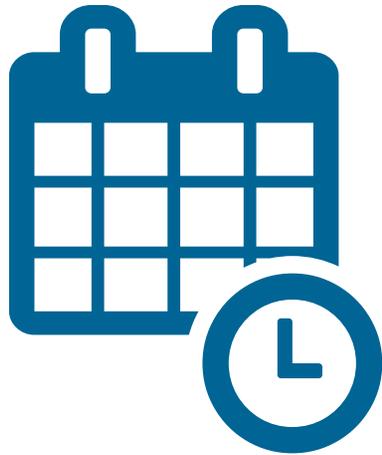
In construction and maintenance, concrete is a large source of emissions. To address this, we participated in the Bay Area [Low Carbon Concrete Code](#) initiative with regional public and private sector stakeholders to support development of a low-carbon concrete performance [specification](#) for new construction projects requirements. Because cement has the highest carbon footprint of concrete's components, low-carbon concrete is typically made by either using only the amount of cement needed for the required strength or replacing the cement with an alternative cementitious material whose production generates fewer carbon emissions.

Figure 8 provides a visual summary of the proportion of emissions by broad purchasing category, as well as a brief summary of the primary source of emissions within the supply chain.

**Figure 8: Primary sources of supply chain emission by category**



# Plan Development



## Plan Development Process

The plan development process took place from 2020 to 2022. Internal stakeholders were consulted extensively, and there were several phases of community input.



### Baseline Assessment

The first stage of plan development was a baseline assessment. We conducted greenhouse gas inventories for 2019 for our operations and supply chain. We reviewed accomplishments and lessons learned from the last plan. (See the final report on the Climate Action Plan for Government Services and Operations Through 2020 in the appendix.)

A few important differences from 2010 became evident: the increasing speed of change in the climate field, the COVID-19 pandemic and focus on equity, and the need to prepare and adapt for climate changes already underway. Given the dynamic nature of climate action, rather than a 10-year timeframe as in the last plan, we decided on a four-year timeframe, to align with the Vision 2026 update in 2026.



The COVID-19 pandemic, which was underway during the entire plan development process, exacerbated health and economic challenges in our community and contributed to resource and staffing constraints across County departments. This context shaped the guiding principles for this GOCAP.

During the course of implementing the last plan, climate effects became more visible. While no one event can directly be attributed to climate change, we saw a pattern by 2017. Staff worked around the clock to address roadway collapses and rockslides from that winter's heavy storms. Six people died in an unprecedented heat wave over Labor Day weekend in the San Francisco Bay Area, where many residents have not historically needed air conditioning. When Alameda County firefighters went to Houston to support hurricane recovery efforts, some of them had started heading back through New Mexico when they were asked to turn around to join Florida's hurricane emergency response. Alameda County provided mutual aid to combat the deadly wildfires in the San Francisco North Bay, while Alameda County residents faced unprecedented levels of air pollution. These events called on County emergency response functions. Hazardous smoke from wildfires became an annual public health issue. Residents faced calls for evacuations due to wildfires. These situations demonstrated the urgent need for climate-resilient systems and communities.

## **Project Initiation**

The next stage was project initiation. In this phase, we reviewed climate plans from leading cities and counties, and extracted over 400 measures relevant to County services and operations. We looked at local government climate targets and California

emissions reductions and resilience goals. We studied best practices for plan development, such as community engagement methods.

We formed the Climate Development Group to advise on plan development. This group of more than 30 staff included representatives from the agencies most involved in leading climate action: the County Administrator's Office, Community Development Agency, Fire Department, General Services Agency, Health Care Services Agency, Information Technology Department, Library, Public Works Agency, Sheriff's Office, and Social Services Agency.

This group was launched in February 2021 and met quarterly. In this stage, the Climate Development Group reviewed and revised the guiding principles and identified key opportunities in the action areas.

We identified the six plan action areas and action area leads, staff from the General Services Agency (GSA) who would shepherd the development of measures in each area.

### **Listening and Strategic Direction**

We identified key staff stakeholders for the six sections and started to meet with them to understand their priorities. This step was crucial to build partnerships and gain commitment from the agency staff who will implement the plan. We found that staff saw benefits of including initiatives in the GOCAP, such as gaining a larger network of support and finding opportunities to collaborate.

At the same time, we reached out to the broader community through a survey, focus groups, and a workshop to understand community priorities.

The Climate Development Group reviewed the inventory and vulnerability assessment results, shared considerations for moving forward with a carbon neutrality target, and gave input on equity approaches.

### **Measure Identification**

We held a community workshop to brainstorm ideas within the six action areas.

Action area leads then worked with staff stakeholders to identify the specific goals and actions that made sense for Alameda County. Action area leads often brought initial ideas to spark conversation, then stakeholders would add new ideas or

recommend how to prioritize existing ones. The goal was to make sure measures were feasible and aligned with other agency efforts.

Once the number of measures were narrowed down, stakeholders prioritized and edited the measure and submeasure language. Agencies confirmed that they would lead or support specific submeasures.

At this stage, the community gave input on draft measures most relevant to them through an online feedback forum platform. Employees gave input on draft measures most relevant to employees through a survey.

The Climate Development Group reviewed community and employee engagement results for measure ideas, advised on Climate Leadership and Governance measures, such as plan implementation approaches, confirmed the carbon neutrality target, and refined the investment-needed ratings scale.

## Plan Finalization

Leads for each action area wrote up background for each measure and worked with internal stakeholders to provide climate benefit and investment-needed ratings for each submeasure. Internal stakeholders then reviewed the narratives for accuracy.

We invited community members and employees who had signed up for plan updates to review the complete final draft plan online, through a platform designed for public comment.

The Climate Development Group advised on plan adoption.

As a final step for this stage, we worked with a graphic designer and editor to make the plan approachable and welcoming.

## Equity and Climate Action

Alameda County is committed to addressing social and health inequities, as stated in the [2021-2022 Legislative Platform](#):

“The County supports policies and practices that promote equitable outcomes for communities marginalized by historically-rooted systems of neglect and oppression so that all people can thrive. Policies and practices should promote equity, and work to eliminate disparities based on race, ethnicity, sovereignty, national origin, immigration status, gender, sexual orientation,

gender identity, age, disability status, and socioeconomic status. The County supports policies that address all forms of systemic oppression, particularly institutional and structural racism, which have played a central role historically and currently in creating and perpetuating persistent social and health inequities.”

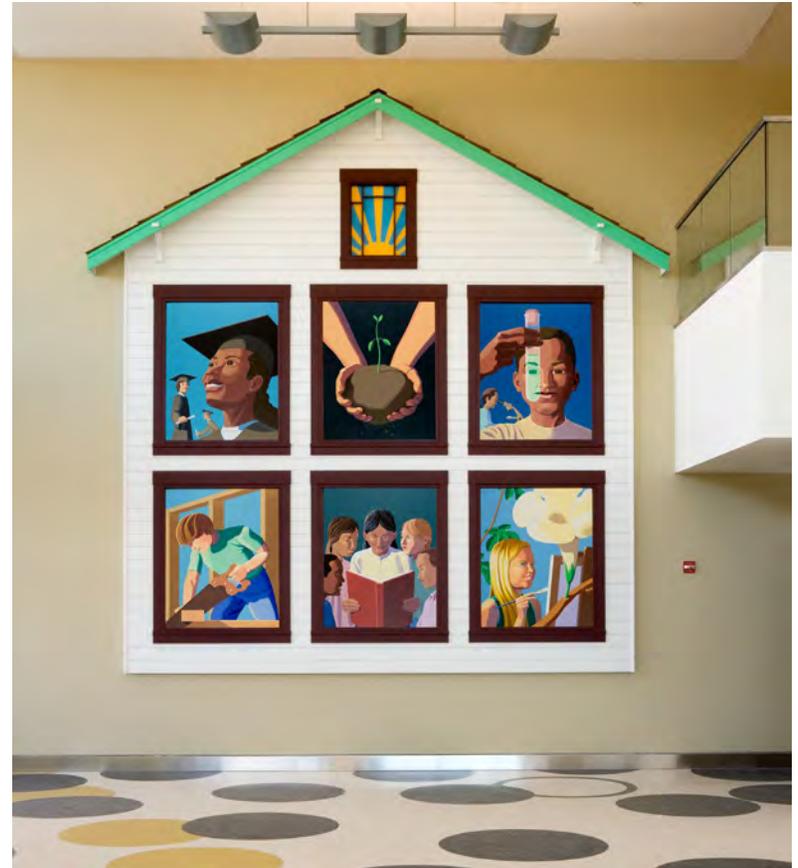
As noted here, inequities did not occur by accident and will not disappear on their own.

The County’s work to address climate change can help rectify inequities. County climate action can support historically and presently underserved communities to become more resilient to climate impacts and to increase their access to opportunities from the transition to a zero-carbon economy, where needs are met without using fossil fuels.

This approach aligns with federal and state funding priorities. The Justice40 Initiative has directed that 40 percent of the overall benefits of federal climate investments flow to disadvantaged communities that are underserved and overburdened by pollution. California’s [Executive Order N-16-22](#) directs state agencies to address identified disparities in their strategic plans.

## Climate Equity

We heard from our community that existing social and economic inequities are exacerbated as climate impacts, such as heat waves and flooding, intensify. Some groups disproportionately burdened by climate change include people living with low incomes, including the uninsured or underinsured, BIPOC communities, immigrants, limited-English-proficient groups, unhoused persons, outdoor workers, children, pregnant women, older adults, persons with disabilities, and persons with chronic medical conditions. Some of the reasons for this disproportionate burden can include vulnerability to health impacts, limited financial resources, or less access to information.



*Alameda County Juvenile Justice Center artwork by Joe Saxe and Renee Petropoulos, part of the Alameda County Art Collection.  
Photo: Sibila Savage.*

These groups are likely to experience the impacts of climate change first and worst and have fewer resources to adapt. We use the term “frontline communities” to refer to these groups.

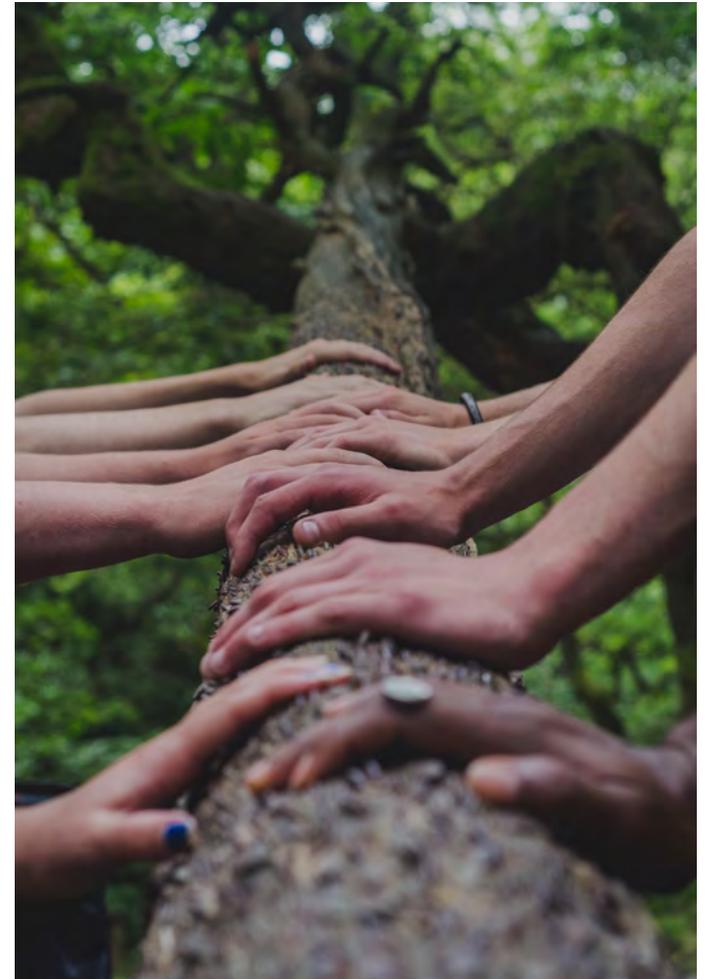
### County Commitment

The Board of Supervisors highlighted the risk of harm to frontline communities in the [Climate Emergency Declaration](#) (R-2019-375).

“...[I]ndividuals and families on the front lines of climate change across Alameda County, the United States, and the world who live with income inequality and poverty, institutional racism, inequity on the basis of gender and sexual orientation, poor infrastructure, and lack of access to health care, housing, clean water, and food security, particularly communities of color, indigenous communities, and low-income communities, and who experience greater risk of harm from climate change because of their close proximity to environmental hazards and stressors, are often the first to suffer the impacts of climate change and have the fewest resources to avoid those impacts or relocate...and this will exacerbate their pre-existing challenges....”

The Board committed to “put into effect priority programs and projects to support resilience efforts within our most vulnerable communities who will be the first affected.”

Government policies played a role in creating the increased climate vulnerability of these frontline communities. The immigration policies that excluded certain populations, such as the Chinese Immigration Act, and Federal Housing Administration underwriting practices affected past generations’ ability to accumulate wealth and pass it to their descendants. Formerly redlined neighborhoods are hotter on hot days and have fewer trees.<sup>7</sup> Since government policies helped create these challenges, they can help respond to them.



<sup>7</sup> Meg Anderson, “Racist Housing Practices From the 1930s Linked to Hotter Neighborhoods Today,” National Public Radio, January 14, 2020, <https://www.npr.org/2020/01/14/795961381/racist-housing-practices-from-the-1930s-linked-to-hotter-neighborhoods-today>.

## Aspects of Equity

Employees working on GOCAP development became familiar with the following definitions, which reflect a range of aspects within the concept of equity:

- Participatory/procedural equity: Processes to develop and implement any program or policy are fair and inclusive and build community capacity and self-determination.
- Distributional equity: Resources or benefits of a policy or program are prioritized for those with the most need first; burdens of a policy or program do not disproportionately burden those with the most need.
- Structural equity: Correcting past harms and preventing future negative consequences by institutionalizing accountability and decision-making structures that aim to sustain positive outcomes.
- Intergenerational equity: Decisions consider generational impacts and do not result in unfair burdens on future generations.<sup>8</sup>

## GOCAP Approach

The GOCAP uses a targeted universalism approach, in which we establish measurable outcomes or benchmarks for all populations while implementing strategies that close the gap for specific communities.<sup>9</sup> Without a targeted strategy, community-wide outcomes may improve while leaving behind the most vulnerable populations, such as frontline communities. We aim for a just transition: that as economies decarbonize, the process is fair and does not disproportionately cost any group of workers or residents their health, environment, jobs, or economic assets.

Governments can reduce barriers for better outcomes through their policies, programs, and relationships. Alameda County residents who participated in our community engagement efforts expressed strong support for the County doing just that. In the public survey, nearly two-thirds of respondents rated prioritizing actions that support social equity and vulnerable communities as “very important” for the GOCAP

---

<sup>8</sup> Angela Park, “Equity in Sustainability: An Equity Scan of Local Government Sustainability Programs,” Urban Sustainability Directors Network, 2014, [https://www.usdn.org/uploads/cms/documents/usdn\\_equity\\_scan\\_sept\\_2014\\_final.pdf](https://www.usdn.org/uploads/cms/documents/usdn_equity_scan_sept_2014_final.pdf).

<sup>9</sup> For more information on targeted universalism, see the [Othering and Belonging Institute](#) at University of California, Berkeley.

## Overarching Goals

Building on the community input, three of the five overarching principles for the plan reflect equity considerations, as noted in italics:

- **Reimagine operations and services to increase efficiency, equity, and access.**
- ***Prioritize the health, well-being, and voices of communities affected most by climate impacts.***
- ***Advance sustainable prosperity for all.***
- **Implement and share bold climate action strategies.**
- **Use a cross-agency, whole-of-government approach.**

## Equity Advisor

We engaged Beth Altshuler Muñoz Consulting, Inc., to serve as an equity advisor for GOCAP development. Beth Altshuler Muñoz Consulting has experience in integrating equity into government processes, programs, and policies related to urban planning, public health, environmental justice, and climate change. Beth Altshuler Muñoz Consulting led an equity workshop for staff involved in GOCAP development, gave input on the community engagement process, co-developed a racial equity amplification tool, and reviewed all plan measures.

## Community and Employee Engagement

To help develop GOCAP measures and priorities, we convened focus groups and listening sessions with members from frontline communities to hear about their needs, priorities, and concerns related to climate impacts. Additional information can be found in the Community Engagement section of this introduction.

## Internal Capacity

Making connections between racial and social equity and climate action was a relatively new concept for some of the internal stakeholders developing the plan. To build a common understanding, we provided two trainings to staff involved in GOCAP



development. Several staff joined an Urban Sustainability Directors Network climate action and equity training in February 2021. In November 2021, Beth Altshuler Muñoz Consulting, in partnership with equity, diversity, and inclusion specialist Danielle DeRuiter-Williams, facilitated an equity workshop informed by what staff requested to learn. The November workshop covered the connections between equity and climate action and highlighted examples of existing County equity initiatives, such as initiatives relating to mobile services during the COVID-19 pandemic. In the workshop, participants gave input on a draft equity tool.

## Equity Amplification Tool

Project teams of County employees reviewed GOCAP measures using the pilot [Equity Amplification Tool](#). The tool is a worksheet containing questions to help participants explore equity implications of a draft climate measure and revise it to increase benefits and reduce burdens for disproportionately burdened communities.

The tool considers multiple aspects of equity but focuses on racial inequities because race is the leading predictor of outcomes across the United States and because, when other aspects of identity such as gender identity, income, ability, sexual orientation, and nationality are considered, inequities persist based on race.<sup>10</sup>

## Goals

The Racial Equity Amplification Tool outlines a process to discuss equity implications of draft measures. The tool provides an opportunity for stakeholders to revise or reframe proposed climate actions so they are less likely to exacerbate existing inequities, less likely to create new inequities, and more likely to address impacts of past inequities. The tool also helps identify which measures have more potential equity benefits to encourage investment in those outcomes.

## Development

In fall 2021, Beth Altshuler Muñoz Consulting, Inc., a small, local equity consultant team, in concert with GSA Office of Sustainability staff, reviewed existing equity assessment tools from across the country, including local tools from Oakland and San Francisco and several tools developed to inform emergency services. The team members developed a draft tool informed by their findings and their expertise. Office of Sustainability staff engaged cross-agency partners from County divisions—including ALL IN Alameda County (a multisector effort to address issues of poverty), the Community Development Agency, and the Library—to refine the tool. In November 2021, we pilot tested the tool at a staff workshop and made updates based on user input.

---

<sup>10</sup> “Why Lead with Race,” Human Impact Partners, last modified July 27, 2019, <https://healthequityguide.org/about/why-lead-with-race>.

## Application

In early 2022, GSA Office of Sustainability staff gathered groups of internal stakeholders for workshops to apply the tool to each measure (about 50) that had been drafted at that point. These groups recommended project changes to maximize positive outcomes and minimize any negative equity implications of climate projects. These changes are captured for transparency in the description of each project in this report.

To give a few examples, for a project in the Built Environment section that addresses replacing natural gas equipment outside buildings with electric equipment, stakeholders recognized the importance of prioritizing equipment in facilities in low-income communities of color already facing disproportionate burdens from local air pollution. For a project in the Community Resilience section on supporting and compensating community members to co-develop climate resilience projects, stakeholders added a component to explore creating a climate justice leadership program that will lead to employment or civic leadership opportunities for communities that experience the worst climate change effects. Equity enhancement opportunities were also found for projects related to County employees, such as emphasizing the need for communications channels to reach outdoor workers in projects focusing on employee safety from climate impacts such as smoke and heat.

## Looking Forward

The approaches taken to consider equity in GOCAP development are initial steps toward equitable climate action at Alameda County. Equity work is an ongoing process and will continue to evolve.

We have built in next steps for implementation. Teams will apply the final tool section after plan adoption at project kick-off, to plan equitable implementation approaches (including community co-development to learn from frontline communities about



the best ways to be inclusive, accessible, and equitable in our services), select equity-related indicators, and share progress with stakeholders. The Community Leadership and Governance section includes a project providing resources and training about equitable community engagement to County staff leading project implementation. Community co-development plays a large role in the Community Resilience section, with the aim of learning from frontline communities about the best ways to be inclusive, accessible, and equitable in delivering County services.

## Learning From Others

The County's Office of Diversity, Equity, and Inclusion, proposed to launch in the 2023-2024 fiscal year, may support plotting new courses for climate equity at the County.

Oakland and San Leandro in Alameda County, as well as other cities and counties including Cleveland, Los Angeles County, Portland (Oregon), San Francisco, Santa Cruz, and Seattle, have identified equity as central to successful climate action plans, and we will continue to learn from their approaches.

## Community Engagement

Alameda County provides a range of services to support local community members, including residents, businesses, and workers in the County. Community members, including those disproportionately harmed by climate change, have valuable insights on how the County can meet climate goals while improving services.

We heard that community members' vision for 2030 was a community that is safe, welcoming, economically vibrant, and on track with climate goals. Participants wanted more green spaces, cleaner air, and community centers for extreme heat days and information on disasters.

Participants were very concerned about climate change impacts. Many had experienced smoky air and extreme temperatures and heat waves. Participants supported bold County climate action. Most said Alameda County's emission reduction goals and climate preparedness efforts should be either more ambitious or on par with those of other Bay Area local governments.

Some of the greatest opportunities that participants noted for the County to address or respond to climate change through our services and operations included electrification of County buildings and transportation, addressing employee

transportation with more telework, providing shade and trees on County lands, and providing resilient County services.

Participants across engagement channels identified equity as essential to successful GOCAP planning and implementation. Participants recommended continuing to build relationships with local communities and community organizations to ensure that voices from frontline communities are heard and considered. They also encouraged coordinating across jurisdictions and agencies.

Input about specific measures is included in the action area sections.



## Our Approach

This plan is the second Alameda County climate action plan for government services and operations and the first GOCAP development process to seek direct input from the public. As this was the first community engagement effort for a GOCAP and took place during the COVID-19 pandemic, we set modest goals. We hoped to gather perspectives from members of the public representative of the diverse communities of Alameda County to inform GOCAP development and to hear from communities disproportionately harmed by climate change.

Our approach was informed by public engagement training by the Institute for Local Government and guidance documents including the [Urban Sustainability Directors Network Guide to Equitable Community Driven Climate Preparedness](#). Support was provided by Cascadia Consulting Group to document the community engagement strategy and to design and coordinate surveys, focus groups and listening sessions, and workshops.

Within the Continuum of Community Engagement shown in Figure 9, our efforts ranged from “inform” to “shared leadership,” with many activities in “consult”:

- **Inform:** Social media and email updates informed the public about the GOCAP development process.
- **Consult:** An online survey and online feedback forum provided opportunities for community input. Community-specific engagement efforts including focus groups consulted people from groups disproportionately harmed by climate change. A dedicated email and phone line provided an opportunity for anyone to comment or request a meeting.
- **Involve:** Community workshops provided an opportunity for conversations among County staff and community members.
- **Shared Leadership:** Partner organizations that serve historically underrepresented communities co-designed how to engage their communities, such as in listening sessions and door-to-door surveys.

**Figure 9: “Continuum of Community Engagement,” in Urban Sustainability Directors Network Guide to Equitable, Community-Driven Climate Preparedness (May 2017), p. 25.**



## Overview of Public Engagement Activities

This table provides an overview of public engagement activities. Summary reports of each effort, as well as an overall summary for activities through May 2022, are available [online](#).

Community Engagement Activity	Dates	Approach	Participants
Public survey (online)	Sept. 7–30, 2021	Participants shared community and business priorities and concerns, including related to climate action and climate impacts.	1,217 responses (in English, traditional Chinese <sup>11</sup> , and Spanish)
Targeted community engagement efforts through partner organizations (virtual focus groups, virtual and in-person listening sessions, door-to-door survey)	Sept. 16 – Oct 9, 2021	Climate-vulnerable communities shared priorities, concerns, and how to improve government services to better respond to climate change impacts.	37 participants in focus groups and listening sessions (in English and Spanish) 97 participants in the door-to-door survey (in English, Mandarin, and Spanish)
First community workshop (virtual)	Nov. 18, 2021	Participants shared suggestions on high-level action proposals and ideas for additional actions.	44 participants
Online feedback forum (using Consider.it platform)	Apr. 19 – May 17, 2022	Participants shared prioritization ratings and comments and discussed a selection of draft GOCAP actions; participants suggested new actions.	80 participants Over 350 forum viewers  Note on the numerical results: the ratings scale ran from -100 (low priority) to 100 (high priority). Therefore, items appear to have a lower rating than if the rating scale was 0 to 100.

<sup>11</sup> Traditional Chinese refers to written Chinese characters, generally used rather than simplified characters in the United States for public communications with Chinese-reading residents.

Community Engagement Activity	Dates	Approach	Participants
Second community workshop (virtual)	May 11, 2022	Participants shared prioritization ratings and comments and discussed a selection of draft GOCAP actions; participants suggested new actions.	26 participants
Draft plan input period (using Konveio platform)	Nov. 1-15, 2022	Participants shared input and edits on the draft plan.	54 participants (registered and anonymous users who gave input) Over 770 site viewers

Each workshop included a background presentation, question and answer periods, interactive polls, and breakout sessions.

We partnered with three community-based organizations and one County program to design tailored engagement efforts to hear from groups most disproportionately harmed by climate change in Alameda County, with a focus on those who were or could be served by County-led or County-funded services or programs. The partners were Healthcare for the Homeless (a program of the County's Health Care Services Agency), La Clínica de la Raza, My Eden Voice, and Roots Community Health Center. The partner organizations recruited participants for focus groups or listening sessions who represented older adults, unhoused residents, people with limited English proficiency, residents with pre-existing health conditions, and uninsured and underinsured residents. In addition, My Eden Voice modified the public survey and administered it door-to-door in unincorporated communities.

## Outreach

We conducted outreach to encourage participation representing the diverse communities in Alameda County through a variety of avenues. In most cases, materials and participation were available in English, Spanish, and traditional Chinese. We took the following steps for outreach efforts:

- Posted flyers (such as the example flyer shown here) in local stores, libraries, County buildings, and community centers. Posted a link to the draft plan on Alameda County Library computer home pages.
- Sent promotional materials for each engagement to local organizations, from environmental advocacy organizations to faith-based organizations to regional agencies, and asked them to share with their networks. We reached out to about 130 organizations regarding the public survey. We added additional organizations over time, and directly sent more than 230 organizations the draft plan link.

- Worked with partner organizations to conduct outreach on the survey and workshops through established channels to their memberships or client base.
- Set up an email list for people who wished to receive updates on GOCAP developments and notified them about each engagement opportunity. As of August 2022, over 475 community members had signed up for this list.
- Shared engagement opportunities on the [GOCAP development webpage](#) and the Alameda County Sustainability showcase page on LinkedIn. County official social media channels, including Twitter, Facebook, and Nextdoor, posted engagement opportunities in multiple languages. County partners shared opportunities on websites and social media and in organizational newsletters, including Board members' district newsletters.
- Encouraged people to share participation opportunities. For example, we encouraged workshop registrants to invite their friends and family. Employees involved in GOCAP development were provided materials to help them share engagement opportunities with their neighborhoods and networks. Some unanticipated partners spread the word. For instance, a teacher encouraged her students to take the community-wide survey during class.
- Notified County employees who have expressed interest in sustainability, many of whom live in Alameda County, of opportunities to give input.

## THE ALAMEDA COUNTY Government Services & Operations Climate Action Plan Survey Is Live!



Speak out on how  
County services help  
make our community  
more resilient to  
climate change.

Enter to win a  
**\$100**  
 gift card!





Take the survey by Sept. 30!

 <https://tinyurl.com/ACGovClimatePlanSurveyEng>



## Principles for Engagement

### Inclusivity

We anticipated that online engagement efforts sponsored directly by the County would yield less representation from communities who have been historically marginalized by government due to lack of trust in and connection with government agencies. The digital divide—the gap between those who have access to technology, the internet, and digital literacy training and those who do not—was also a barrier we predicted for digital engagements. With each engagement effort, optional demographic questions were asked to check for population parity. Participation in the community-wide survey was disproportionately reflective of, for example, homeowners; Native American, American Indian, or Alaska Native and white or Caucasian residents; and people aged 20 to 44, as compared to countywide demographics.

We collaborated with partner organizations on tailored engagements described previously. The hope of these tailored engagements was to learn from the participants' lived experiences with climate change and assess needs that might be met by County offerings. These partner organizations helped us understand potential issues of concern for the communities they serve and co-developed the approach for the engagement activities they supported. They also assisted with outreach for other community engagement activities to help include their members and clients in the discussion.

### Accessibility

We aimed to provide a range of engagement options, both verbal and written, both at a specific time or at the participants' time of choice, to expand accessibility.

We made a video, "[Planning for a Healthy Future: A Decade of Climate Action Leadership](#)," to provide an accessible, inspiring introduction to the GOCAP. In general, we aimed to use straightforward language and messages to make the topics clear.

The survey, workshop slides, and all promotional materials were translated into the three most commonly read languages in Alameda County: English, Spanish, and traditional Chinese. For the first and second community workshops, we offered simultaneous translation and Spanish- and Mandarin-speaking breakouts; no participants requested these options. The online feedback forum, platform for commenting on the draft plan, and plan webpage were available in 97 languages through Google Translate.

One focus group was hosted in Spanish, and the door-to-door surveyors spoke with residents in Spanish and Mandarin.

For the second workshop, we prepared a breakout option for those with limited access to technology. Participants in that breakout could give suggestions by audio only rather than by both audio and online. However, no participant required this option.

We held the two workshops in the evenings to accommodate participants who work daytime shifts. We offered a phone line and email as options to provide input at any time in any language.

Many more people clicked on the survey than completed it, registered for the workshops than attended, and registered for the online feedback forum than participated, perhaps indicating some barriers to continuing their participation.

We had hoped to host in-person activities to reduce technical barriers to participation, but due to COVID-19 pandemic restrictions, most engagement activities were online. The My Eden Voice listening session and door-to-door survey were conducted in person.

For the draft plan review, we created a video posted on YouTube with guidance on how to give input to provide an option for learning about the process beyond reading text on the plan review website.

## **Equity**

Because the communities most affected by climate change and organizations within these communities face many burdens on their time, it would have been inappropriate to ask for input without compensation. We compensated three community-based organizations to convene the community-specific engagement activities and to share other engagement opportunities to their members and networks. Participants in focus groups and listening sessions were directly compensated through the community engagement consultant. An external equity advisor reviewed the community engagement strategy and the second workshop presentation and facilitation approach.

## **Transparency**

We aimed to start the engagement early in the planning process to give an opportunity for community input to shape the plan.

We posted findings from each community engagement activity online. When feasible, we notified participants when results were posted. We notified participants from the first workshop, where questions were raised and not answered due to time constraints, when responses were posted. We are committed to following up with past participants, such as by sharing the completed plan with those who have opted in to receive updates. We have kept the online review sites available so comments can be viewed.

## **Application of Community Engagement Results to Draft Measures**

Initial community engagement efforts—the public survey and community-specific engagements—sought input on what challenges community members faced and what types of actions they would like to see prioritized in the GOCAP.

Later community engagement efforts—the workshops and online feedback forum—gave members of the public specific draft measures to consider and asked for feedback on measure content and language. Input at this stage may have affirmed existing measures, resulted in edits to existing measures, or led to development of new measures.

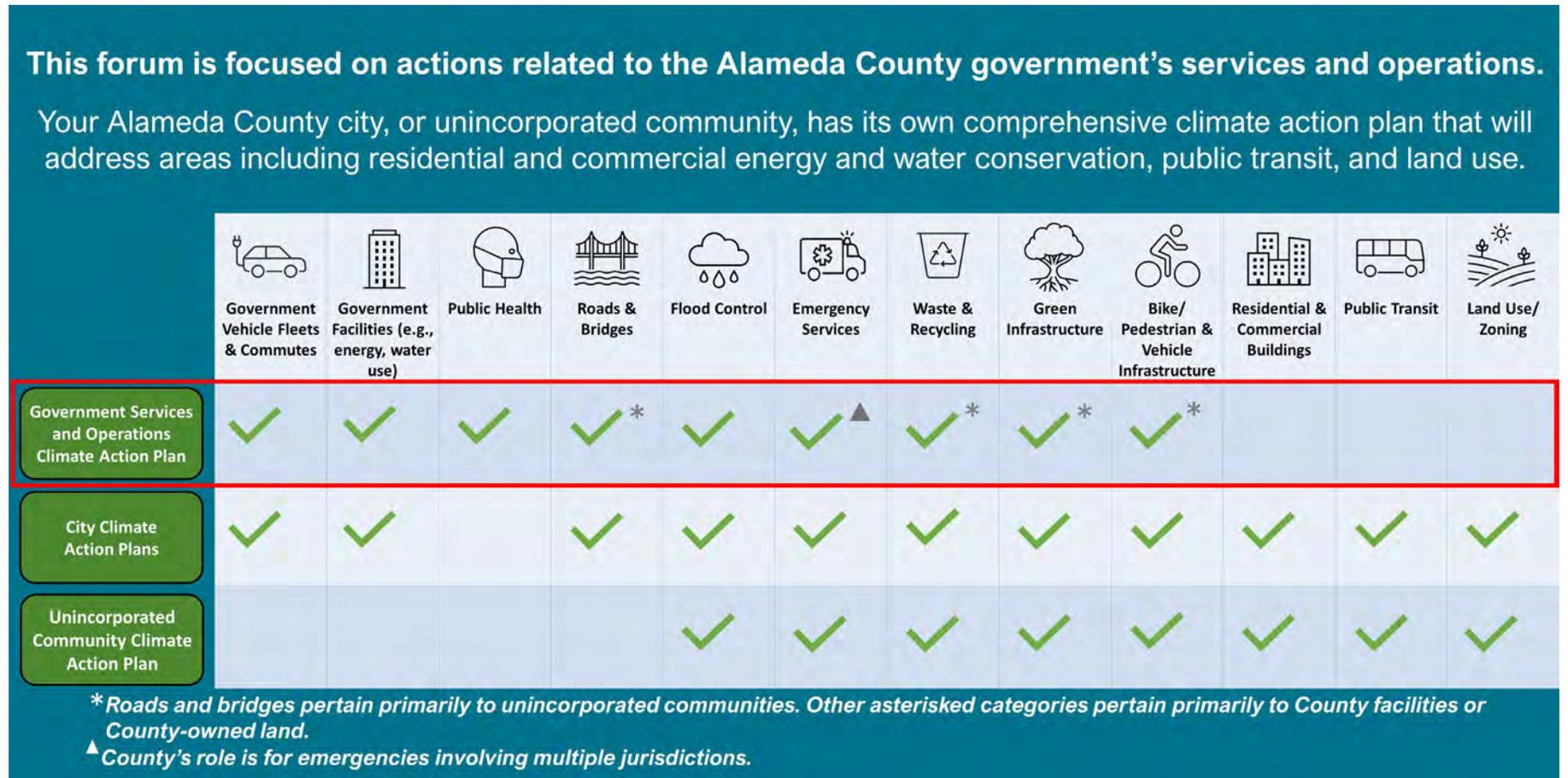
For measures in the plan, a section in each measure description explains how the GOCAP authors considered stakeholder and community input. An example of an edited measure is the resilience resources measure in the Community Resilience section. Focus group and the public survey participants suggested that the measure include increased support for unhoused residents, who are particularly vulnerable to climate impacts. We edited existing submeasures and added new submeasures to further protect unhoused residents from climate change impacts.

## **Input Beyond Plan Scope**

Because the GOCAP focuses on County government services and operations, while the public is more familiar with city services and roles, we anticipated that some input would be not directly applicable.

We shared a graphic (Figure 10) showing the scope of the GOCAP, but naturally received input beyond the scope. For instance, community members expressed support for public transportation efforts in the purview of transit agencies and bike lane changes in the purview of cities or the County's Community Climate Action Plan prepared by the Community Development Agency. Community members also gave input on economic development or job creation beyond the scope of County programs.

Figure 10: Graphic posted on the online feedback forum and shared during the second workshop



We will share the community engagement reports with sustainability staff in the 14 cities in Alameda County and with the Community Development Agency, so they can consider input more relevant to their own climate plans. (When community members mentioned areas that County government services and operations can influence, these suggestions were considered for the GOCAP. Due to community suggestions, we increased support for employees using transit or bikes in the Transportation section and added workforce-related actions in the Green Economy and Prosperity section.)

## Community Engagement During Plan Implementation

We will build on this experience to move toward shared leadership or community-driven approaches when appropriate to the projects. Many measures in the GOCAP, such as in the Community Resilience section, will be successfully implemented only with input from the communities they serve. For measures dealing with County operations, the community engaged will be affected employees. We will also aim to reach out to communities directly affected by County operations of County facilities and fleets and the businesses affected by County purchasing policies.

We will continue to strive toward accessibility, such as by providing materials in languages tailored to the community relevant to the project and by offering multiple pathways or platforms to engage.

## Employee Engagement

County employees will implement the measures in the GOCAP, so the active engagement of these implementers in plan development was a crucial ingredient of success. Because this plan concerns our operations and services, the broader employee population is an important stakeholder group with expertise in how to improve their workplace efficiency and preparedness.

### Climate Development Group

The Climate Development Group, composed of more than 30 staff from 10 agencies, met eight times as a full group between February 2021 and October 2022, as well as meeting for training and as small committees on topics such as creating the measure rating scales described in the Guide to the Report section.

Because we sought energized, inclusive, and meaningful group collaboration, we applied facilitation methods from the [Technology of Participation](#) at Climate Development Group meetings and other



meetings and workshops. As plan development took place during the COVID-19 pandemic, we found virtual tools such as Mural to be particularly valuable in capturing group input.

### Staff Consultations

Each lead for an action area regularly consulted staff who will implement specific measures or who have relevant expertise. More than 100 employees from 16 County agencies were directly consulted, individually in dedicated meetings, or as part of standing staff meetings.

### Employee Input

We invited all employees to weigh in on the plan. In March 2022, over 600 employees completed a survey specific to County employees. In the GOCAP, this survey is referred to as the employee survey. Employees shared how climate change affects them and their clients. They rated and shared ideas for greener and more resilient services and operations. They indicated that climate action, both to reduce our contribution to climate change and to minimize the impact of climate disruptions, was important to them. Responses that informed projects are discussed in the description of each project.

Over 700 employees on an email list for employees with interest in sustainability topics received regular updates on opportunities to weigh in through the community engagement process.

Employees also gave input on commutes and remote work that is referenced in this report through another survey. In March 2021, more than 3,200 employees responded to the annual employee commute survey, which included questions on telework.

#### Agencies that are leading or supporting measures:

Auditor  
 County Administrator's Office  
 County Library  
 District Attorney's Office  
 Fire Department  
 General Services Agency  
 Human Resource Services Agency  
 Health Care Services Agency  
 Information Technology Department  
 Probation Department  
 Public Works Agency  
 Social Services Agency  
 Sheriff's Office  
 Treasurer-Tax Collector

#### Additional agencies involved in advising on measures include:

Board of Supervisors  
 Community Development Agency

This 2021 survey is referred to in this document as the employee commute survey.

## Voices of Employees

In the employee survey, employees provided some general input not related to specific measures.

*Thanks for bringing climate-related concerns to the table and actually doing something about them. I am proud that my employer takes action in this important area.*

*This is not a personal behavior issue. We have to cease using fossil fuels, change farming processes, and reduce manufacturing and consumption of nonrenewables, and all of this requires local, state, federal, and global infrastructure investment.*



## Voices of Climate Development Group Members

Climate Development Group members shared their thoughts on the importance of taking action.

*We're seeing and feeling the worsening impacts of climate change right before our eyes. As local government, we have a responsibility to help our residents, businesses, and employees be safe and resilient to these unprecedented challenges.*

—Jency James, General Services Agency

*As a Bay Area native, I'm proud to see my County taking action on climate change to shore up my community for the future.*

—Sarah Church, General Services Agency

*Climate action is important because ensuring climate resilience increases Alameda County's overall resilience*

—Domingo Cabrera, Sheriff's Office

*As a County employee who has commuted via BART for years, I value Alameda County's commitment to climate action and fully support new and ongoing investments into sustainable infrastructure and transportation systems.*

—Casey Zirbel, Health Care Services Agency

*Climate action is important because turtles are fantastic creatures, and without our purposeful, active prevention of further damage to our planet, they will starve*

—Rachel Johnson, General Services Agency

*Being proactive in supporting community resilience gives our residents peace of mind and decreases need for emergent responses for services or resources. Alameda County is important in this effort as we are trailblazers in protecting our most vulnerable residents as well as understanding the far-reaching benefits of community action. We can act as a catalyst and model for other counties and communities as they consider their roles in this life-and-death struggle.*

—Lauri McFadden, Health Care Services Agency

*I'm proud of supporting our nonprofit communities and environmentally impacted areas.*

—Michael Rodriguez, General Services Agency

*The Library often functions as a social, physical, and educational safety net for our members. We are often a reflection of the most vulnerable and we witness the direct impacts of excessive heat, poor air quality, and insufficient reuse and recycling. The more we do now to support the GOCAP, the less harm mitigation will be needed in the future.*

—Deb Sica, County Library

*Creating sea change starts with one stroke, one step, one act. As the saying goes, "If not now, when? If not me, who?" I want to be part of the solution and not part of the problem, so I appreciate the opportunity to work on action plans that lead to improving our planet's climate outcomes. Being a part of the County's sustainability efforts is one way to do just that, and it has been my privilege to serve our community in this capacity.*

—Julie Hadnot, Social Services Agency



*As an Oakland native, I've personally witnessed the impacts of drought, heat, fire, smoke, contamination, and pollution since the Oakland firestorm when I was a child. The climate crisis continues to disproportionately affect our low-income neighbors and communities of color. I'm excited to participate in the County's work leading the way to further resilience, environmental stewardship, and equitable planning driven by community needs. Let's do it now, while time remains to bring the biggest benefit to our young people and future generations.*

—Ben Gomberg, County Library

*Climate change requires cross-jurisdictional and global action to be effective. State and federal programs are offering significant funding for climate action. Securing such grants will add capacity to our programs and enhance services throughout the county. As one of the most populated counties in California and the United States, it's important that we in Alameda County step out as national leaders.*

—Brentt Blaser, Sheriff's Office

*As local government workers, our professions are focused on local issues. Climate work is an opportunity for local government action to have global impacts.*

—Ali Abbors, Community Development Agency

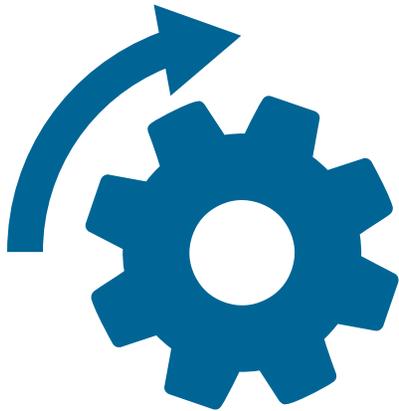
*Climate action is important to me personally and to the Alameda County Social Services Agency. Our most vulnerable populations are most affected by natural disasters, emergencies, and power safety shut-off events, so the steps outlined in the GOCAP are essential to addressing current and future community needs. This goes hand-in-hand and aligns with safety net services we provide to individuals, children and families, immigrants, and the unhoused.*

—Lynn Peralta, Social Services Agency

*Climate action is an extremely important issue that we as a community need to resolve. While this step may be incredibly large, it is crucial for the survival of humankind. It is great to see a County that I both live and work in dedicate resources to address climate action. I am thrilled to be a part of the team as the work here will directly affect my work as a firefighter and help prevent large-scale devastation. I am confident that this work will shape our and the next generation's future.*

—Eric Moore, Fire Department

# Implementation



## Plan Approach

In this plan, each submeasure has at least one identified lead agency or division, along with supporting agencies. These agencies' staff and leadership have confirmed their agreement that they will play an important role in carrying the submeasures out.

The GOCAP was designed to provide a flexible roadmap for implementation. The submeasures listed in the plan are projects that support the overall measure goal. We expect that, due to resource constraints and a need to prioritize, not every submeasure will be tackled.

Even without resource constraints, not every submeasure will be completed.

Circumstances, needs, and technologies change. Federal and state funding may fund some submeasures at a larger scope than anticipated, leaving less staff time available for other measures.

Agencies are welcome to identify alternative or additional actions to achieve the measure goal. The desired outcome is not necessarily to complete the submeasures but to achieve the measure goals and overarching plan goals. Take the measure in the Community Resilience section that aims to increase household resilience to climate impacts. This measure includes a submeasure about developing warehouses for emergency supply distribution. This submeasure may be dropped or changed if it is no longer relevant, a new approach is preferred, or another submeasure takes priority. Another organization may take the lead on developing such warehouses, a better approach for supply distribution may be found in collaboration with community leaders, or another way of increasing resilience may become a larger priority than emergency supply distribution.



## Implementation Structures

The Climate Leadership and Governance section includes several measures establishing plan implementation structures, facilitated by the GSA Office of Sustainability. Section-area working groups will meet regularly to coordinate. These groups will engage projects leads in setting and reporting back on measure-specific metrics. A cross-agency staff group, similar to the Climate Development Group that advised on plan development, will meet at least annually to coordinate across sections and identify resource needs. Both groups will help track progress and keep the implementing agencies coordinated as submeasures get underway. An annual report to the Board of Supervisors and the public also provides accountability. The annual report will outline progress made in each section, highlight innovative projects, and identify unforeseen challenges.

Individual agencies will use their own leadership structure to prioritize work internally. The Health Care Services Agency, for example, has created an internal climate team. If an agency faces barriers on a given submeasure, they can focus on other submeasures.

For coordination regionally and with cities, we will work through existing networks such as the Bay Area Climate Adaptation Network.

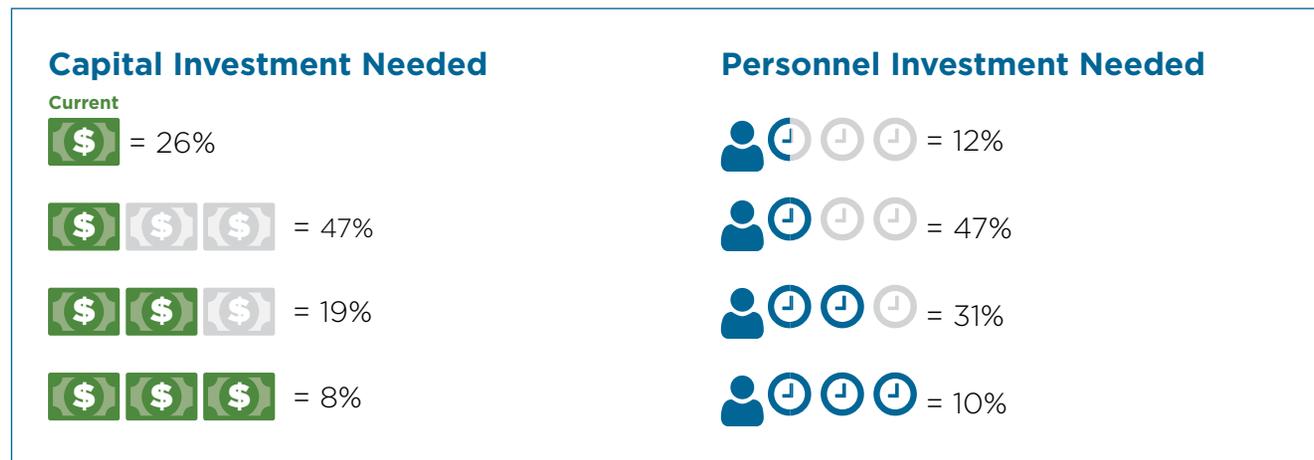
## Implementation Considerations

### Resource Needs

Agencies listed are supportive of these actions, but most actions will require resources not yet allocated. These will not be possible to complete without resources allocated to them.

Investment needed is noted by submeasure. Where the climate action adds an incremental cost to a related effort, such as an additional cost for purchasing more efficient equipment, the rating reflects the incremental resource needs.

The majority of measures are in the middle range for capital and personnel investment needed. (The scale is detailed in the Guide to the Report section.)



Across the plan's 214 submeasures, 69 have the full capital investment needed; 113 have the full personnel investment needed. Excluding projects that do not yet have resources specifically allocated to them would have excluded most submeasures and excluded much of the important climate work that stakeholders identified.

After plan adoption, we will prioritize and assess actions for feasibility. We will assess which actions will most help prevent future costs and risks. We will move forward what is most feasible and has support and resources. This may include initiatives most likely to be eligible for external funding.

The six sections are fairly independent with different arrays of agencies leading in each section. Generally speaking, measures in different sections will not directly be competing for County resources. Within a section, lead agencies will want to coordinate to prioritize and assess actions for feasibility.

The plan does not include cost estimates because projects are not yet fully developed. Each project team will develop its own scope of work and cost estimate. In most cases, costs are incremental for modifications to existing work, as agencies integrate efforts into their areas of work. Some projects may be found to be cost-prohibitive. Others may obtain grant funding. For Built Environment measures, we expect to find resources on a building-project basis, as is the general approach for capital projects.

### Metrics

We will track and develop metrics as covered in the action area sections. Some metrics will reflect the priority climate action benefits.

Priority Climate Action Benefit	Submeasures in Plan With This Benefit	Action Areas With Significant Representation of This Benefit
 <b>County Operations</b>	Greenhouse Gas Reductions from Operations	24%
 <b>Supply Chain</b>	Greenhouse Gas Reductions from Supply Chain	11%
 <b>Community/Global</b>	Greenhouse Gas Reductions in the Community or Globally	8%
 <b>Operational</b>	Greenhouse Gas Reductions in the Community or Globally	18%
 <b>Community</b>	Greenhouse Gas Reductions in the Community or Globally	43%

## Co-benefits

We will keep the co-benefits in mind when implementing the measures in order to maximize all the potential benefits of actions.

Co-benefit	Submeasures in Plan With This Co-benefit	Action Areas With Significant Representation of This Co-benefit
 Community Prosperity	17%	Green Economy and Prosperit
 Flexible Services	17%	Transportation
 Frontline Community Benefits	21%	Community Resilience, Green Economy and Prosperity
 Health and Safety	42%	Built Environment, Community Resilience
 Natural Resources Protection	22%	Built Environment
 Return on Investment	16%	Built Environment, Sustainable Materials Management

## Time Frame

The time frame for this plan is four years, from 2023 to 2026. Agencies will prioritize what can best happen within this period.

## Next Plan

We anticipate that we will create the next climate plan in 2026 or 2027 through a streamlined planning process to prioritize remaining actions and build on completed actions from this plan. Agencies that are not able to complete actions due to resource limitations will nominate them for the next plan.

We did an extensive consultative process to develop this plan, and the overarching goals are unlikely to change. Many of the actions in this plan lay groundwork for goals that require more than four years to achieve, such as zero waste or fleet decarbonization. Rather than preparing an entirely new plan, we will likely be able to identify a list of prioritized actions that could be an update or annex to this plan.

We will also look for opportunities to align with Vision 2036 goals when Vision 2026 is updated in 2026.

### **For More Information or to Share Ideas**

Visit our [website](#) or [contact us](#) to learn more or share your thoughts.

## Climate Change: What Can One Person Do?

Addressing climate change is a large challenge but one we can all help solve. A great way to make a difference is to support efforts happening where you live. Here are some ideas to get you started.

**Vote and contact your representatives:** Before you vote, learn about the candidates' positions on climate actions. [Contact your representatives](#) about issues that concern you.

**Get involved:** Our area has many local sustainability, climate, and environmental justice organizations.

**Talk to others:** Talk to your friends, family, and colleagues about climate action. Consider support networks like the [Good Grief Network](#) if you feel overwhelmed.

**Learn more:** Get to know your local ecosystem by walking outside and visiting local parks. Take a free course on climate change, such as those available through the [California State Library](#) on Coursera.

**Be prepared:** Assemble supplies you may need for climate emergencies, such as N95 masks for [smoky air](#) or fans and washcloths to stay cool in [heat waves](#).

**Travel efficiently:** Take and support sustainable transportation, including BART and buses. Bike and walk. When you need to drive, try to combine trips, use a car-sharing program, or carpool.



**Upgrade your home's energy efficiency:** Use energy-efficient light bulbs. When replacing appliances like laundry machines and dishwashers, look for Energy Star-rated appliances. If your electricity provider offers it, consider choosing 100 percent renewable electricity. If you own your home, weatherize to decrease heating and cooling needs.

**Conserve water:** Install low-flow toilets and water conservation devices on older taps. Put an hourglass timer in your shower to remind you to shorten shower times. If you have a yard, landscape with native and drought-resistant plants.

**Use energy, water, and waste incentives:** You may be eligible for rebates for [energy-efficient](#) and water-efficient products from your local utilities.

**Choose climate-friendly foods:** Consider reducing how often you eat products with higher climate impacts, such as beef, dairy, out-of-season fruits, and heavily processed items. When possible, purchase food grown regionally, such as from farmers' markets.

**Reduce food waste:** Plan ahead to use your fruits and vegetables. [Compost scraps and peels.](#)

**Buy less stuff:** Purchase items secondhand, join a Buy Nothing group, share items with friends and neighbors, and donate gently used household goods and clothes. Find out how to reuse, repair, recycle, or safely dispose of [specific types of items](#) locally.

**If you can help implement one of the actions in this plan, please [contact us](#).**

**[Sign up for our email list](#) to receive updates about this plan.**

# Guide to the Report



The GOCAP report layout is intended to facilitate implementation of actions by responsible agencies. This section provides a guide to key terms and icons used in the plan.

## Action Area Sections

In each of the six action area sections, you will find:

- An introductory narrative to orient you to the content in the section.
- Two to four subsections containing groups of related measures.
- Measures, each with a table showing the actions, called submeasures, that will be undertaken to achieve that measure.

## Six Action Areas

### Built Environment (BE)

Manage the County's buildings, infrastructure, and landscapes to reduce greenhouse gas emissions and increase the climate resilience of our County portfolio.

### Community Resilience (CR)

Increase the resilience and preparedness of the communities we serve to protect from climate shocks like heat waves, wildfires, or flooding.

### Green Economy and Prosperity (GEP)

Invest in win-win strategies that reduce the County's environmental footprint while growing the local economy and creating jobs and economic opportunity for residents.

### Sustainable Materials Management (SMM)

Implement upstream solutions and circular economy principles to reduce the amount of waste generated in County operations.

### Transportation (T)

Reduce greenhouse gas emissions in the County's fleet operations and employee commutes.

### Climate Leadership and Governance (CLG)

Amplify actions through external communications, reduce climate risk in investments, and provide a foundation for other plan actions by creating implementation structures, addressing cross-cutting approaches like telework, and supporting employees to prepare for climate impacts.

# Guide to a Measures Table

## Measure Title

## Measure Description

Lead Departments are shown in bold.

Capital Investment required during the four-year GOCAP implementation period is shown in a scale of icons, noting current capital and existing capital when applicable.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
a. Submeasure description.	<b>GSA-Property &amp; Salvage</b> GSA-Sustainability	GHG:  County Operations  Resilience:  Community	Capital: Current  + Existing    Personnel:     Existing	 Return on Investment Health and Safety

Projected **Greenhouse Gass Emission (GHG) Reductions** are indicated by one (moderate reductions) or two (major reductions) icons, noting the area of benefit below..

Projected increase in **Resilience Benefits** are indicated by an icon, noting the area of benefit below.

**Personnel Investment** required during the four-year GOCAP implementation period is shown in a scale of icons, noting existing personnel when applicable.

Up to three potential additional **Co-benefits** to the County and community beyond the priority benefits of reduced GHG and increased resilience are listed with their representative icon above.

**Please see the following pages for finer table details.**

## Measure

A measure is a goal in an action area.

## Submeasure

Submeasures, the actions or projects recommended by the GOCAP to achieve measure goals, are written using an action verb to describe the activities of the responsible agency or agencies.

Each is identified with a letter. The first submeasure in the first measure of the Transportation section, for example, would be referred to as Transportation 1a or T 1a.

## Key Departments

The agency or agencies responsible for implementing each action are listed. If applicable, a lead agency is designated, or roles such as advisor are delineated. As needed, specific programs, divisions, or departments are named.

The listed abbreviations are used in measures tables for Alameda County agencies, departments, and divisions. The top-level bullets reflect agencies or departments. Indented bullets are divisions within an agency or department. GSA chose to identify responsible divisions in the published plan, to assist with implementation planning.

## Department Abbreviations Used

**ACSO:** Sheriff's Office

- **ACSO-OES:** Office of Emergency Services

**Auditor:** Auditor-Controller Agency

**CAO:** County Administrator's Office

**District Attorney:** District Attorney's Office

**DSAL:** Deputy Sheriffs' Activity League

**Fire:** Fire Department

**GSA:** General Services Agency

- **GSA-BMD:** Building Maintenance Department

- **GSA-Capital Programs:** Capital Programs

- **GSA-Capital Planning:** Strategic Facilities Capital Planning

- **GSA-Energy:** Energy Program

- **GSA-Logistics:** Logistics Services

- **GSA-Operations:** Operations

- **GSA-OAP:** Office of Acquisition Policy

- **GSA-Procurement:** Procurement Department

- **GSA-P&S:** Property and Salvage

- **GSA-Real Property:** Real Property Management

- **GSA-Sustainability:** Office of Sustainability

**HCSA:** Health Care Services Agency

**HRS:** Human Resource Services

**ITD:** Information Technology Department

**Library:** County Library

**Probation:** Probation Department

**PWA:** Public Works Agency

**SSA:** Social Services Agency

**Treasurer:** Treasurer-Tax Collector

### Priority Climate Action Benefits

The Priority Climate Action Benefits Scale shows the projected greenhouse gas emissions reduction or resilience benefit of each action. The benefits expressed can be used to help track, group, and prioritize actions.

If an action does not have a rating in this column, it is a foundational action that enables other actions with a direct climate benefit.

### GHG: Greenhouse Gas Emissions Reduction Benefits

**GHG: County Operations:** Reduction of operational or commute emissions, which are emissions included in our greenhouse gas inventory

**GHG: Supply Chain:** Reduction of supply chain emissions, which are emissions included in our supply chain inventory

**GHG: Community/Global:** Reduction of community or global emissions

**As an example, of GHG with Supply Chain designation:**

 Supply Chain		 Supply Chain	A second cloud identifies actions that, if accomplished, would contribute to major greenhouse gas reductions and a high impact.
---	--	---	---

### Resilience Benefits

**Resilience: County Operations:** Enhancement to operational or internal resilience, or ability to address and recover from climate shocks, of the County as an organization

**Resilience: Community:** Enhancement to the resilience of the neighborhoods, residents, businesses, or the community as a whole in the geographic area of Alameda County

**As an example, of Resilience with Community designation:**

 Community
--

## Investment Needed

The investment-needed ratings show the projected amount of capital and personnel resources needed to implement each plan action as written. (If an action is written to “explore” a project, the rating is for the project if undertaken after exploration.) Ratings represent the minimum resources needed to complete the action.

Ratings reflect investment needed during the four-year GOCAP implementation period.

Ratings aggregate capital and personnel across multiple programs or agencies. Where the climate action adds an incremental cost to a related effort, such as an additional cost for purchasing more efficient equipment, ratings reflect the incremental resource needs. While success in one action may mean fewer resources are needed to implement another action, each action was considered as a stand-alone undertaking for rating purposes.

These ratings reflect the current understanding of County action leads and are subject to change due to shifts in funding and staffing contexts or implementation insights.

The ratings for each action can be used to help identify or match funding opportunities and aggregate needs to advance climate actions in a coordinated fashion.

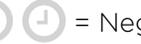
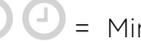
### Capital Investment Needed

*(Consultant costs are included in this category.)*

- Current**  
 +  = Current level, or new or additional \$0 to \$5,000
- Current**  
 +  = \$5,000 to \$500,000
- Current**  
 +  = \$500,000 to \$5,000,000
- Current**  
 +  = More than \$5,000,000

**Existing** = Existing or identified sources of funding will cover estimated costs. Because “Current” level reflects no or minimal additional costs, existing is not used with “Current” rating.

### Personnel Investment Needed

-    = Negligible additional staff time
-    = Minimal additional staff time
-    = Substantial additional personnel hours
-   = More than a one full-time equivalent of personnel hours

**Existing** = Existing or identified staff resources will cover the staff time.

## Co-benefits

Co-benefits show potential additional County and community benefits to an action or submeasure, beyond the priority benefits of reduced greenhouse gas emissions and increased resilience. Co-benefits allow for grouping, prioritization, and impact assessment of actions. Co-benefits are not guaranteed but can be achieved if included in project goals.

Up to three co-benefits may be listed for each action. They are listed alphabetically.



**Community Prosperity** includes green job creation, energy cost savings for residents, and other economic opportunities.



**Flexible Services** includes enhanced mobility, innovative approaches to service delivery, technological innovations, flexible building use, workforce flexibility, and accessible services.



**Frontline Community Benefits** include protecting the groups most affected by climate impacts, such as unhoused people or older adults; improving neighborhood capacity; and other social equity benefits. We include in this category employees such as outdoor workers who are most affected by climate impacts.



**Health and Safety** includes protecting human health, increasing food security, and promoting safety in emergencies. We include in this category mental health during climate shocks.



**Natural Resources Protection** includes reduced air or water pollution, less use of energy or water, soil quality enhancements, and ecosystem biodiversity benefits.



**Return on Investment** includes cost savings.

# Built Environment

## MEASURES

### Program Management

BE 1: Policy Development and Program Management

### Reduce Emissions

BE 2: Decarbonize New Construction

BE 3: Decarbonize the Existing Portfolio

BE 4: Low-Carbon Operations

BE 5: Green Lease

### Reduce and Remove Carbon

BE 6: Optimize Site and Space Planning for Carbon Efficiency

BE 7: Minimize Life Cycle Carbon Emissions of Construction and Building Materials

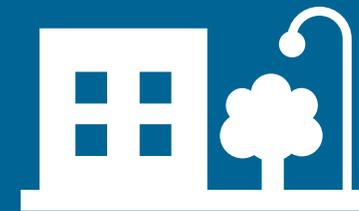
BE 8: Carbon Sequestration

### Prepare the Portfolio

BE 9: Climate Resilience for the Building and Infrastructure Portfolio

BE 10: Manage Lands for Climate Resilience

BE 11: Water Conservation and Drought Preparedness



This section covers how we will manage the

County's buildings, infrastructure, and landscapes to reduce greenhouse gas emissions and increase the climate resilience of our County portfolio.

## Section Introduction

### Description

The built environment is a significant source of greenhouse gas emissions, contributing almost 40 percent of emissions globally from operations alone. The embodied carbon of materials used in constructing buildings is also an important source of emissions. Substantially reducing or eliminating these sources of emissions is essential to addressing climate change and meeting our commitment to climate neutrality.

Alameda County owns or leases approximately 8.7 million square feet of facilities and operates public infrastructure (e.g., streetlights, pump stations) in the unincorporated areas of the county. The Board of Supervisors has demonstrated a long-standing commitment to energy conservation, carbon reduction, and green building practices. The Board adopted the Green Building Ordinance for County Facilities ([O-2003-63](#)) in 2003, and in 2019 adopted the Resolution Endorsing the Declaration of a Climate Emergency ([R-2019-375](#)), which commits the County to “aggressively pursue emission reduction strategies in its own operations and invest in resilient service delivery.” The County has pursued multiple program strategies that result in significant carbon footprint reductions, including implementing comprehensive energy efficiency programs, adding on-site renewable power generation, and procuring carbon-free electricity through East Bay Community Energy, the local



power provider formed in 2018 through the leadership of the Alameda County Community Development Agency. These and other initiatives in our facilities and infrastructure have significantly reduced the County’s greenhouse gas emissions, contributing approximately 84 percent of the total reductions from our 2003 baseline as measured in our 2019 government operations inventory.

In this plan, the County seeks to build on our previous work by decarbonizing our portfolio through a phased transition away from natural gas to electric-powered equipment and powering that equipment with renewable energy. We expand our focus to improve the County’s building portfolio and infrastructure resilience to ensure continuity of operations and services during climate-related hazards, such as increased high-heat days and poor air quality due to more frequent wildfires. In addition, we seek to manage

County buildings, landscapes, and open spaces in ways that mitigate climate change, sequester carbon, conserve water resources, and enhance community resilience. These efforts align with priorities in the Alameda County fiscal year 2022–2023 [budget](#), which states “Update green building standards and property selection criteria to reduce climate footprint and promote resiliency of County operations.”

This plan aligns the County with California’s leadership in climate action. In September 2022, Governor Newsom signed into law a sweeping package of climate legislation that establishes targets and regulations focused on electrification, renewable energy generation, refrigerant management, drought mitigation, and more. The California Air Resources Board has stated a policy commitment to ban the sale of natural gas-powered water- and space-heating equipment by 2030. Actions the County takes now to prepare for these changes will help us access federal and state funding for the transition and comply with the future regulatory environment.

The COVID-19 pandemic changed the way we think about the need for administrative office space at the County. For certain County functions, work is no longer a place we go, but something we do from anywhere. In 2020, the Board of Supervisors adopted guidance supporting remote work and virtual first service delivery as a Countywide priority to make government services accessible at any time on any device.

## Greenhouse Gas Reductions

In 2019, the operation of County facilities and physical infrastructure in the unincorporated county areas contributed about 32 percent of the greenhouse gas emissions measured in the [government operations inventory](#). Additionally, 2019 expenditures for the construction and maintenance of County facilities and infrastructure contributed approximately 25 percent of the greenhouse gas emissions measured in the [supply chain inventory](#).

If successfully completed, the measures laid out in this action area section will achieve modest reductions in greenhouse gas emissions by 2026 and set the County on the path toward our target of a 50 percent reduction in emissions by 2030 and carbon neutrality in our building operations by 2045. Significant planning and funding will be required to achieve this bold target, with the greatest opportunity for emission reductions coming from electrification of building equipment and powering the equipment with purchased or on-site-generated renewable electricity.

## Resilience Benefits Overview

To ensure continuity of services to our community, the County’s buildings and infrastructure must withstand, quickly recover from, and adapt to climate hazards including wildfires, smoky air, flooding, sea level rise, heat waves, and related events, such as public safety power shutoffs. Improving public buildings like libraries and

youth centers to serve as resilience hubs or inclement weather centers can benefit frontline communities more likely to be hurt first and worst by climate change impacts. Incorporating projected climate impacts into planning decisions can prevent the need for additional future investment and improve our long-term resilience.

## Equity Overview

The County portfolio offers many opportunities to promote equity. In applying the equity tool, our team considered where equity intersects the built environment in the following ways:<sup>1</sup>

- Where are we locating government services? Are they accessible to the communities that have been historically marginalized and discriminated against? Are they located where services are most needed?
- Where are we investing in resilience? Is it in communities that will be hit first and worst by climate impacts?
- How do our investments affect affordability and protect against displacement? How do they affect infrastructure that contributes to social determinants of health and resilience, like access to green space?
- How can our contracting efforts and investments in our physical infrastructure and landscapes lift up opportunities for expanding access to jobs that pay family-supporting wages?



*Urban stream restoration provides natural habitat and resilience benefits. The Castro Valley Creek Restoration Project featured a public art bridge (part of the Alameda County Art Collection) leading to the Castro Valley Library by artists David Duskin and David Whippen.*

Using the equity amplification tool, we identified opportunities for prioritizing County investments in advancing resilience hubs or inclement weather centers and targeting the removal of natural gas infrastructure in County facilities that serve or are located near frontline communities. We also identified opportunities to increase contracting with target populations identified in the Green Economy and Prosperity section of the GOCAP by increasing outreach and implementing robust metrics tracking.

<sup>1</sup> List was adapted for County use by reviewing research and frameworks developed by Urban Sustainability Directors Network and Greenlining Institute. Many of the strategies highlighted in these frameworks consider how government policy and programs affect privately owned real estate (residential and commercial) and broader community strategies.

## Vision 2026 Alignment

The proposed measures in the Built Environment section of the plan align with the Healthy Environment, Prosperous and Vibrant Economy, and Safe and Livable Communities vision elements and advance the Accessible Infrastructure 10X goal by aggressively pursuing emission reduction strategies in our facilities and infrastructure, investing in resilient service delivery, seeking opportunities to remove carbon from the atmosphere, and conserving water through our building operations and land use practices.

## Monitoring and Reporting

Many of the Built Environment measures include quantitative goals for carbon, energy, or water use, or include a provision to develop a goal through additional analysis. Success of other measures will be monitored and reported on by assessing the number of projects that achieve the goal or by quantifying the changes to equipment, staff trained, or other unit measurement.

## Measures

### Program Management

#### BE 1: Policy Development and Program Management

**Update the County’s policy and programmatic framework to support implementing industry-leading practices to decarbonize the County’s portfolio, advance carbon sequestration efforts, and incorporate climate considerations into facility and infrastructure planning to achieve the long-term goals of carbon neutrality and resilient County operations.**

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
a. Establish a sustainable portfolio working group to coordinate policy and programmatic efforts to meet energy efficiency, decarbonization, and resilience goals related to the County’s building portfolio.	<b>GSA-Sustainability</b> <b>GSA-Energy</b> GSA-BMD GSA-Capital Planning GSA-Capital Programs GSA-Real Property	—	Capital: Current  +  Personnel:     Existing	—

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>b. Adopt an updated green building ordinance by the end of 2024 to support implementing the built environment measures in this plan, the Local Hazard Mitigation Plan, the Real Estate Master Plan, and other relevant County plans and policies, that is in alignment with Vision 2026.</p>	<p><b>GSA-Sustainability</b>  <b>GSA-Energy</b>                      GSA-BMD                      GSA-Capital Planning                      GSA-Capital Programs                      GSA-Real Property                      Advisor: PWA</p>	<p>GHG:    <b>County Operations</b></p> <p>Resilience:    <b>County Operations</b></p>	<p>Capital:                      Current   + </p> <p>Personnel:       <b>Existing</b></p>	<p>—</p>
<p>c. Continue to benchmark and publicly disclose energy and water usage in buildings through standardized energy and water audits and self-reporting.</p>	<p><b>GSA-Energy</b>                      GSA-BMD</p>	<p>GHG:    <b>County Operations</b></p> <p>Resilience:    <b>County Operations</b></p>	<p>Capital:                      Current   + </p> <p>Personnel:       <b>Existing</b></p>	<p>  <b>Natural Resources Protection</b>  <b>Return on Investment</b></p>

## Background and Description

Achieving the goals in the Built Environment section of the GOCAP will require extensive coordination between stakeholders across the entire project life cycle, beginning with portfolio master planning, through project prioritization, inception, and funding, and finally to project design, construction, and management. The intent of this measure is to put in place the program management and policy framework required to coordinate these efforts, and to track the data needed to measure success. This coordinated effort will advance the goals set out in the fiscal year 2022–2023 [County budget](#) to “Update green building standards and property selection criteria to reduce climate footprint and promote resiliency of County operations.”

This measure builds on the County’s existing Green Building Ordinance for County Facilities ([O-2003-63](#)) adopted by the Board of Supervisors in 2003. More recently, the General Services Agency convened an ad hoc advisory work group to coordinate developing this section of the GOCAP. The group will continue convening to advance a coordinated implementation of the plan. The work group will seek input from and coordinate implementation actions with the Public Works Agency, other County agencies, and external stakeholders and partners as needed, to ensure a comprehensive and whole of government approach to achieving carbon reductions across the County’s building and infrastructure portfolio.

## Vision 2026 Alignment

This measure aligns with the Healthy Environment and Safe and Livable Communities vision elements and advances the Accessible Infrastructure 10X goal by establishing the policy and programmatic infrastructure for bold actions to aggressively pursue emission reduction strategies in County government operations and invest in resilient service delivery.

## Equity Description

In developing the policy and program infrastructure, our team determined that centering equity in decision-making processes would align our efforts with the Board of Supervisors' directive to support a just transition to a carbon-free economy, as stated in the climate emergency declaration.

## Community Engagement

A consistent theme across all responses to the community engagement efforts, including the surveys, workshops, and focus groups, was that respondents are very concerned about climate impacts and have a strong interest in seeing the County commit to bold climate action. Community members indicated that they are already being affected by climate impacts; for example, in the public survey, 62 percent of those interviewed responded that their health had been affected by climate impacts. This feedback necessitates a coordinated policy and program infrastructure, which is planned for in this measure.

## Metrics and Outcomes

This measure will be evaluated by assessing the adoption of program and policy structures that support the implementation of the climate action plan. The intended outcome is to cost-effectively eliminate the need for fossil fuels and maximize energy efficiency and reliance on renewable power.



*REACH Ashland Youth Center public artwork by artists Eduardo Pineda and Joaquin Newman, part of the Alameda County Art Collection.  
Photo: Sibila Savage.*

## Reduce Emissions

### BE 2: Decarbonize New Construction

**Design and construct new buildings and major renovations to produce zero carbon emissions, maximize energy efficiency, incorporate distributed energy resources, and optimize those resources for grid interconnectivity.**

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
a. Require all new County-funded building construction to be all electric. Ensure the design meets load requirements for current and future electric vehicle infrastructure needs for County and public use.	<b>GSA-Capital Programs</b> GSA-Energy Advisor: GSA-Logistics	GHG:  County Operations	Capital: Current  Personnel:  Existing	 <b>Health and Safety</b> <b>Natural Resources Protection</b>
b. Incorporate into major capital projects on-site distributed energy resources, such as electricity generation with energy storage and solar thermal systems. Ensure systems optimize energy resilience and grid interconnectivity.	<b>GSA-Capital Programs</b> <b>GSA-Energy</b> GSA-BMD	GHG:  County Operations  Resilience:  County Operations	Capital: Current  Personnel:  Existing	 <b>Health and Safety</b> <b>Return on Investment</b>
c. Ensure building design maximizes energy efficiency across all building systems targeting a performance of 10 percent less energy use than required by California Code Title 24.	<b>GSA-Capital Programs</b> GSA-Energy	GHG:  County Operations	Capital: Current  Personnel:  Existing	 <b>Natural Resources Protection</b> <b>Return on Investment</b>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>d. Continue to require all new construction and major renovations with a project budget of \$5 million or greater to achieve a minimum green building rating of <a href="#">LEED®</a> Silver, or an equivalent standard appropriate to the building type and project scope.</p>	<p><b>GSA-Capital Programs</b> GSA-Energy GSA-Sustainability</p>	<p>GHG:  County Operations</p>	<p>Capital: Current </p> <p>Personnel:  Existing</p>	<p> <b>Health and Safety</b> <b>Natural Resources Protection</b> <b>Return on Investment</b></p>
<p>e. Continue to implement state regulatory requirements limiting the global warming potential (GWP) of refrigerants used in new building equipment and infrastructure.</p>	<p><b>GSA-Capital Programs</b> GSA-BMD GSA-Energy GSA-Sustainability</p>	<p>GHG:  County Operations</p>	<p>Capital: Current </p> <p>Personnel:  Existing</p>	<p> <b>Natural Resources Protection</b></p>

## Background and Description

Designing and constructing buildings to be all electric eliminates the need for on-site burning of fossil fuels and allows our facilities to be powered with renewable electricity. Strategically pairing electrification with energy efficiency goals and green building standards allows the County to realize cost savings over a building’s lifetime for a positive return on investment. Certain refrigerants can be potent climate-warming pollutants with thousands of times greater capacity to warm the atmosphere than carbon dioxide. The state legislature passed Senate Bill (SB) 1383, Short-Lived Climate Pollutant Reduction Strategy (Lara, Chapter 395, Statutes of 2016), which mandates a 40 percent reduction in hydrofluorocarbons emissions by 2030 through phaseout and improved management.

This section builds on the County’s long-standing efforts to minimize our building portfolio’s impact. The Board of Supervisors were early supporters of taking bold action related to the County’s portfolio, in 2003 adopting the Green Building Ordinance for County Facilities, which requires new capital projects to achieve LEED Silver. Since then, the County has certified 12 projects, with half of those achieving LEED Gold or Platinum ratings. In addition, the County has been an early leader in implementing on-site renewable energy projects, installing a 1.2 MW system at our County jail facility in 2002. Since then, 11 projects have been installed, and in 2019 they produced 4.8 MW of energy, or 16 percent of the total electricity used by the County in that year.

## Vision 2026 Alignment

This measure aligns with the Healthy Environment and Safe and Livable Communities vision elements and advances the Accessible Infrastructure 10X goal by substantially reducing the generation of climate-warming pollutants while improving the resilience of County services.

## Equity Description

Important equity factors in this measure include reducing exposure to indoor and outdoor air emissions caused by burning fossil fuels on-site, hiring practices for construction contracts, and unintended consequences from utility-scale renewable energy generation. The application of the equity tool illuminated these considerations, but the team did not identify a need to modify this measure. Equitable hiring practices are addressed in the Green Economy and Prosperity section of this plan.

## Community Engagement

In both the community and employee climate surveys, most respondents called for energy efficiency and asked for buildings to be powered by clean electricity. In the online feedback forum, the submeasure on all electric new construction received an average priority rating of 77 on a scale of -100 to 100, with one respondent writing, “All new construction, county funded or not, needs to be all electric starting now.”

## Metrics and Outcomes

This measure will be evaluated on a project basis by assessing the number of projects that meet the objectives of the measure and each submeasure. The intended outcome is to cost-effectively eliminate the use of fossil fuels and to maximize energy efficiency and use of lower GWP refrigerants.



*The Alameda County Juvenile Justice Center's roof hosts solar panels.*

### BE 3: Decarbonize the Existing Portfolio

**Decrease the greenhouse gas emissions across our existing building portfolio targeting a 50 percent reduction by 2030 and achieve carbon neutrality in our building operations by 2045.**

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Inventory all small natural gas-fired equipment, including but not limited to residential-style hot water heaters and rooftop heating, ventilation, and air-conditioning (HVAC) package units. Develop a phaseout plan by the end of 2024 to replace them with high-efficiency electric equipment, prioritizing equipment in facilities located in frontline communities disproportionately affected by air pollution.</p>	<p><b>GSA-Energy</b> GSA-BMD Advisor: GSA-Logistics</p>	<p>GHG:  County Operations</p>	<p>Capital: Current  + </p> <p>Personnel:  Existing</p>	<p> <b>Health and Safety</b> <b>Natural Resources Protection</b> <b>Return on Investment</b></p>
<p>b. Require life cycle assessments for the electrification of major building equipment at the time of natural replacement. By the end of 2024, establish equipment replacement decision-making criteria that prioritize the reduction of life cycle costs over first cost, include an accounting for greenhouse gas emissions generated from all sources (e.g., natural gas, refrigerants), and include equity considerations.</p>	<p><b>GSA-Energy</b> GSA-BMD GSA-Capital Programs GSA-Sustainability</p>	<p>GHG:  County Operations</p>	<p>Capital: Current  + </p> <p>Personnel:  Existing</p>	<p> <b>Health and Safety</b> <b>Natural Resources Protection</b> <b>Return on Investment</b></p>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
c. Establish and incorporate energy efficiency performance targets (e.g., EUI, COP) into the basis of design or specifications for mechanical and electrical projects consistent with industry best practices.	<b>GSA-Energy</b> <b>GSA-BMD</b> GSA-Capital Programs	GHG:  County Operations	Capital: Current  Personnel:  Existing	 <b>Health and Safety</b> <b>Natural Resources Protection</b> <b>Return on Investment</b>
d. Continue to implement green building performance requirements for all renovations, regardless of size, that align with industry best practices for sustainable building materials and energy efficiency performance as appropriate to the building type and project scope.	<b>GSA-Capital Programs</b> <b>GSA-BMD</b> GSA-Energy GSA-Sustainability	GHG:  County Operations	Capital: Current  Personnel:  Existing	 <b>Health and Safety</b> <b>Natural Resources Protection</b> <b>Return on Investment</b>

## Background and Description

Approximately 28 percent of greenhouse gas emissions measured in the County’s 2019 greenhouse gas emissions inventory come from the County’s portfolio of buildings. Fossil fuels, including natural gas used to power the equipment that operates the buildings, are the primary source of these emissions.

In 2018, then California Governor Jerry Brown signed executive order B-55-18 committing the state to achieve economy-wide carbon neutrality by 2045. In May 2022, the California Air Resources Board issued a draft scoping plan update that identified strategies to achieve this goal, which include developing building performance standards for existing buildings and adopting a zero-emissions standard for new space and water heaters sold statewide by 2030. These and other state and regional actions will necessitate a transition to electric-powered equipment in the County’s buildings, allowing them to be powered by renewable electricity from either on-site generated or purchased sources.

This measure builds on existing energy efficiency efforts, including portfolio-wide lighting retrofits, solar thermal water heating and heat recovery strategies to reduce the energy required to heat water at high-use facilities, and early adoption of electric heat pump technology for small space- or water-heating equipment.

## Vision 2026 Alignment

This measure aligns with Healthy Environment and Safe and Livable Communities vision elements and advances the Accessible Infrastructure 10X goal by substantially reducing the generation of climate-warming pollutants.

## Equity Description

Important equity factors related to this measure include reducing exposure to indoor and outdoor air emissions from on-site combustion of fossil fuels to power building equipment and supporting equitable hiring practices for construction contracts.

Application of the equity tool identified opportunities to prioritize transitioning away from fossil fuel-burning equipment at County-owned facilities in frontline communities disproportionately affected by air pollution. These communities will be defined through activities described in the Community Resilience section of the plan. A community member expressed support for this change as follows in the online feedback forum: “Appreciate the acknowledgment to prioritize updates in certain overburdened communities first.” Equitable hiring practices are addressed in the Green Economy and Prosperity section of the plan.

## Community Engagement

In the public survey, almost 70 percent of respondents thought that green, efficient County buildings using clean power would be a key strategy for fighting climate change. Most respondents also indicated that they were “very concerned” about several climate impacts, which motivates the County to pursue bold decarbonization pathways. In our community workshops, we heard from participants a strong desire for the County to go all electric as quickly as possible while increasing energy efficiency of our buildings. As a direct result of public and employee input, this measure maintains an ambitious target of a 50 percent carbon emission reduction by 2030.

## Metrics and Outcomes

This measure will be evaluated by tracking and monitoring energy use annually as well as the greenhouse gas emissions associated with those energy sources through periodic greenhouse gas emission inventories. Success will be measured by improvements to overall energy efficiency of County operations, with the objective of setting us on course for our target of reducing greenhouse gas emissions from our facilities by 50 percent by 2030.



*The René C. Davidson Courthouse, completed in 1934, is one of the oldest buildings the County maintains in our portfolio.*

## BE 4: Low-Carbon Operations

Operate County buildings using industry best practices to minimize environmental impact.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Develop and implement operational procedures to maximize energy efficiency and the generation potential of renewable energy resources and storage, in alignment with Title 24 and industry best practices, such as ASHRAE standards. Create policies for set points for major building systems. Establish training program and performance accountability within building maintenance operations to meet these goals.</p>	<p><b>GSA-BMD</b> <b>GSA-Energy</b></p>	<p>GHG:  County Operations</p>	<p>Capital: Current  +   </p> <p>Personnel:     Existing</p>	<p> <b>Natural Resources Protection</b> <b>Return on Investment</b></p>
<p>b. Procure renewable electricity from the local utility provider for County buildings, facilities, and infrastructure.</p>	<p><b>GSA-Energy</b></p>	<p>GHG:   County Operations</p>	<p>Capital: Current  +   </p> <p>Personnel:     Existing</p>	<p> <b>Health and Safety</b> <b>Natural Resources Protection</b></p>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
c. Inventory refrigerant use in building equipment and develop a plan by 2025 to phase out use of high global warming potential (GWP) refrigerants, in line with state and local policies.	<b>GSA-Energy</b> GSA-BMD GSA-Capital Programs	GHG:  County Operations	Capital: Current  Personnel:  Existing	 Natural Resources Protection

### Background and Description

Effective operations and maintenance practices are critical to ensuring that the County’s equipment achieves maximum efficiency or renewable power generation. As technology changes, we must continue to invest in training so that staff can optimize equipment performance. In addition to carbon reduction benefits, energy efficiency efforts will help minimize the life cycle costs of operating facilities.

Refrigerants leaked into the environment can be thousands of times more potent a greenhouse gas than carbon dioxide. The state legislature passed SB 1383, Short-Lived Climate Pollutant Reduction Strategy (Lara, Chapter 395, Statutes of 2016), which mandates a 40 percent reduction in hydrofluorocarbons emissions by 2030 through phaseout and improved management.

These efforts continue the County’s current commitment to energy efficient operations and our practice of procuring 100 percent clean power from East Bay Community Energy, the local community power provider established in 2018 through the leadership of the Alameda County Community Development Agency.

### Vision 2026 Alignment

This measure aligns with the Healthy Environment and Safe and Livable Communities vision elements and advances the Accessible Infrastructure 10X goal by setting operational standards that will reduce the generation of carbon dioxide and other climate-warming pollutants.

## Equity Description

These initiatives focus predominantly on internal operational decisions and programs. The equity focus is therefore on ensuring equitable access to training for staff and consistent application of performance standards across the agency.

## Community Engagement

Participants in the community workshops and focus groups strongly encouraged the County to go carbon-free as quickly as possible. In the online feedback forum, the submeasure on procuring renewable energy received an average priority rating of 76 on a scale of -100 to 100. In response to input from the online feedback forum, the measure was modified to clarify that the procurement of renewable electricity will be from the local utility provider.

## Metrics and Outcomes

This measure will be evaluated by tracking the amount of renewable energy procured and produced on-site, the energy efficiency of facilities compared with previous years, and progress on the establishment of a phaseout program for refrigerants. The intended outcome is to cost-effectively eliminate the need for fossil fuels, maximize building efficiency, increase use of renewable power, and use lower GWP refrigerants for building operations.



*The REACH Ashland Youth Center achieved LEED Platinum certification, the highest rating available, when it opened in 2013.*

## BE 5: Green Lease

**Develop green lease language for the County’s standard lease agreements that aligns with County building performance standards for energy, water, and resource efficiency.**

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
a. Incorporate the County’s green building ordinance requirements and design guidelines into build-to-suit development projects, tenant improvement projects, and major renovation projects, as applicable.	<b>GSA-Real Property</b>	GHG:  County Operations	Capital: Current  +    Personnel:     Existing	   <b>Health and Safety</b> <b>Natural Resources Protection</b> <b>Return on Investment</b>
b. Include procurement of renewable electricity from the local utility provider for building operational needs in lease negotiations when the County is the majority tenant.	<b>GSA-Real Property</b>	GHG:  County Operations	Capital: Current  +    Personnel:     Existing	 <b>Health and Safety</b>

### Background and Description

The County leases 900,000 square feet of real estate, which comprises 10 percent of the total square feet of office space occupied by County departments. These leased spaces contribute 3 percent of the greenhouse gas emissions measured in the County’s greenhouse gas emissions inventory. Most of these leases are for small field offices to provide services close to the communities served; however, the County has several larger lease agreements where it serves as the single or majority tenant of the property.

The 2010 Climate Action Plan identified green leasing as an opportunity for carbon reduction, and in 2015 GSA-Real Property Management and GSA-Office of Sustainability partnered to develop green lease language promoting energy efficiency and green building practices by landlords. This measure seeks to build on that work to incorporate County standards into new and renegotiated leases.

## Vision 2026 Alignment

This measure supports the Healthy Environment vision element and advances the Accessible Infrastructure 10X goal by aligning green building practices in owned and leased facilities.

## Equity Description

Application of the equity tool identified the importance of allowing leased facilities to enjoy the same upgrades as owned facilities to ensure employees and clients have equitable access to the benefits of green buildings. Important equity factors for this measure include reducing exposure to indoor and outdoor air emissions due to burning fossil fuels on-site, and ensuring all employees and clients have access to facilities that achieve high standards for green building. We reviewed the measures with these factors in mind and determined that the measures adequately addressed these issues.

## Community Engagement

67 percent of respondents to the public survey indicated it was very important for the County to lead on energy efficiency and clean electricity. This feedback is applied to leased facilities as well as owned. Additionally, in response to results from the online feedback forum, Measure 5 was modified to clarify the procurement of renewable electricity from local utility providers.

## Metrics and Outcomes

This measure will be evaluated by assessing the establishment of contracting language to support implementing these initiatives, as well as on a project basis by tracking the number of new leases that incorporate these initiatives where the County is the sole or majority tenant. The intended outcome is to cost-effectively eliminate the need for fossil fuels, maximize energy efficiency, and increase use of renewable power in leased building operations where the County is the sole or majority tenant.



*The County's East County Hall of Justice, completed in 2017, provides co-located law enforcement and judicial services.*

## Reduce and Remove Carbon

### BE 6: Optimize Site and Space Planning for Carbon Efficiency

Plan, design, and manage the County’s building portfolio to minimize greenhouse gas emissions associated with site selection and space use.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Incorporate into real estate master planning and implementation processes criteria consistent with transit-oriented development principles, such as siting new County facilities and leases within walking distance of public transit, major amenities, or the communities that will be served, prioritizing communities that have been historically underserved.</p>	<p><b>GSA-Capital Planning</b>  <b>GSA-Real Property</b>                      Advisor: GSA-Logistics</p>	<p>GHG:    <b>Community/Global</b>  <b>County Operations</b></p>	<p>Capital:                      Current   +   </p> <p>Personnel:       <b>Existing</b></p>	<p>    <b>Flexible Services</b>  <b>Frontline Community Benefits</b>  <b>Natural Resources Protection</b></p>
<p>b. Develop and implement a strategic plan to reduce administrative office space by maximizing space efficiency in alignment with Board-approved real estate efficiency policies. Consider opportunities for free addressing, flexible touchdown workstations, hoteling, hot desking, and other strategies to enable ongoing telework.</p>	<p><b>GSA-Real Property</b>  <b>GSA-Capital Planning</b>                      GSA-Capital Programs</p>	<p>GHG:    <b>Community/Global</b>  <b>County Operations</b></p>	<p>Capital:                      Current   +   </p> <p>Personnel:       <b>Existing</b></p>	<p>   <b>Flexible Services</b>  <b>Return on Investment</b></p>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>c. Develop a methodology to consider the direct and indirect economic, social, and environmental costs of carbon emissions. Use this methodology when planning for future capital portfolio changes in building and infrastructure planning and decision-making processes, such as the real estate master plan, facility condition assessments, capital improvement plan, and other funding and financing decisions used by the County.</p>	<p><b>GSA-Capital Planning</b>  <b>GSA-Sustainability</b>                      GSA-Energy</p>	<p>GHG:                        County Operations</p>	<p>Capital:                      Current   +</p> <p>Personnel:                        Existing</p>	<p>                      Return on Investment</p>

### Background and Description

Employee commute emissions comprised over 50 percent of the emissions measured in the County’s 2019 greenhouse gas emissions inventory for government operations. Siting facilities near public transit and other services will enable County employees and visitors to use lower-carbon means of transportation, such as BART or buses, especially as last-mile mobility options like e-bike and e-scooter share programs increase locally. This measure is complemented by telework strategy enhancements described in Measure 8 of the Climate Leadership and Governance section of this plan.

In 2010, the Board of Supervisors first adopted a Real Property Portfolio Management Efficiency, Effectiveness, and Sustainability policy, which was updated in 2022 ([R-2022-489](#)) to align with current space efficiency practices and standards. In 2020, the County Administrator’s Office developed guidance for County departments to support remote work and virtual first service delivery. The COVID-19 pandemic accelerated cultural change and acceptance of telework and modern space planning concepts that acknowledge work is no longer a place we go, but something we do from anywhere on any device.

### Vision 2026 Alignment

This measure aligns with the Healthy Environment and Safe and Livable Communities vision elements and advances the Accessible Infrastructure 10X goal by improving accessibility to services, reducing overall portfolio space needs, and ensuring the externalized cost of carbon emissions is considered and incorporated into County capital planning efforts.

## Equity Description

The County provides essential services to residents, and it is important to ensure equity is central in the long-term planning of facilities and the accessibility of services. In applying the equity tool, we considered the impact of tailpipe emissions from vehicles when County facilities serving the public are not accessible to transit.

## Community Engagement

Nearly 60 percent of the public survey's respondents identified low-emissions County employee commuting or telecommuting as a very important strategy to reduce greenhouse gas emissions associated with County operations. In the door-to-door survey, a key recurring theme was to reduce pollution from cars. In the employee commute survey, employees overwhelmingly expressed interest in continued or increased opportunities to telework, with 92 percent interested in regularly teleworking. This measure speaks to this feedback by maximizing space efficiency and promoting telework. Measure 6 was also modified in response to online feedback forum comments from the public requesting that we site County facilities in alignment with transit-oriented development principles.

## Metrics and Outcomes

This measure will be evaluated by assessing the development of relevant evaluation and planning tools to support implementation of its initiatives, and by evaluating the space planning efficiency in facilities over time. The intended outcome is to cost-effectively minimize fossil fuel use in vehicles traveling to County buildings and incorporate carbon emissions and other factors into portfolio decision-making processes.



*With technology, many employees can work effectively remotely.*

## BE 7: Minimize Life Cycle Carbon Emissions of Construction and Building Materials

Minimize greenhouse gas emissions generated throughout the entire building life cycle through design optimization, material selection, and construction practices.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Develop minimum global warming potential (GWP) limits for construction materials, prioritizing concrete and steel initially, in alignment with state and regional efforts, to minimize embodied carbon in construction. Explore opportunities to incorporate reclaimed and carbon-sequestering building materials (e.g., straw bale, carbon capture technology, mass timber, hemp-lime concrete) in construction projects.</p>	<p><b>GSA-Sustainability</b>  <b>GSA-Capital Programs</b>                      GSA-BMD                      PWA</p>	<p>GHG:                        Supply Chain</p>	<p>Capital:                      Current   + </p> <p>Personnel:                        Existing</p>	 Natural Resources Protection
<p>b. Require projects over \$5 million to complete a whole building life cycle analysis in a manner consistent with ISO Standards 21931 and 14044 during the conceptual or schematic design phase. Incorporate findings into the project's basis of design so that the proposed building demonstrates a minimum of 5 percent reduction in global warming potential (GWP).</p>	<p><b>GSA-Capital Programs</b>                      GSA-Sustainability</p>	<p>GHG:                        County Operations                        Supply Chain</p>	<p>Capital:                      Current   + </p> <p>Personnel:                        Existing</p>	  Natural Resources Protection Return on Investment

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>c. Reduce construction site emissions by incorporating contract provisions that limit idling and encourage or require the use of electric or low-emissions equipment, where feasible. Explore opportunities to require use of R99 renewable diesel in place of fossil diesel when electric equipment is not available.</p>	<p><b>GSA-Sustainability</b>  <b>GSA-Capital Programs</b>                      GSA-BMD                      PWA</p>	<p>GHG:                        Supply Chain</p>	<p>Capital:                      Current                        Personnel:                        Existing</p>	<p>                      Health and Safety                      Natural Resources Protection</p>

## Background and Description

The County analyzed the greenhouse gas emissions related to procuring goods and services in our [supply chain inventory](#) and determined that construction services were the second-largest source of these emissions, comprising 36 percent and 25 percent, respectively, in 2015 and 2019. Significant sources of emissions in this sector come from the fossil fuel and process emissions generated when manufacturing concrete and steel, as well as the construction site emissions from construction vehicles and equipment. Burning diesel also harms residents’ health by increasing the amount of fine particulate matter, a direct contributor to asthma. The American Lung Association’s annual State of the Air report<sup>2</sup> gives Alameda County an F rating for our air quality, citing over 147,000 people in the county with asthma. The California legislature passed SB 596 (Becker, Chapter 246, Statutes of 2021), signed by Governor Newsom in September 2021, which requires the California Air Resources Board to develop a comprehensive strategy for the state’s cement sector to achieve a greenhouse gas intensity 40 percent below 2019 levels by 2035, and net-zero emissions by 2045.

These efforts will build on the County’s experiences with incorporating options for low-carbon concrete in construction contracts for municipal facilities, and our use of R99 renewable diesel for County vehicles. It will also position the County to incorporate contract provisions for electric and low- or zero-emissions heavy equipment vehicles as technology advances.

Material reuse, recycling, and deconstruction practices related to the built environment are addressed in Measure 7 of the Sustainable Materials Management section.

<sup>2</sup> “State of the Air,” American Lung Association, accessed June 29, 2022, <https://www.lung.org/research/sota/city-rankings/states/california/alameda>.

## Vision 2026 Alignment

This measure aligns with the Healthy Environment and Safe and Livable Communities vision elements and the Accessible Infrastructure 10X goal by advancing technologies that reduce carbon emissions and health impacts associated with burning diesel fuel within the County's construction supply chain.

## Equity Description

Important equity factors related to this measure include the local and global health effects of burning fossil fuels to manufacture building materials and to operate construction equipment. BIPOC communities are disproportionately affected by industrial manufacturing because of historical public policy decisions that pushed these sectors into their communities.

Application of the equity tool reinforced the importance of reducing local and global emissions related to the construction supply chain, reinforcing the importance of reducing the greenhouse gas intensity of construction materials and equipment.

## Community Engagement

Participants in the first community workshop expressed their desire to see the County use low-carbon concrete and other actions that reduce supply chain emissions. This feedback supports the County's plans to look beyond our own operational emissions and use our sizable purchasing power to lead by example in reducing the greenhouse gas emissions that result from our purchase of goods and services.

BE 7a was modified to add reclaimed materials to types of preferred building materials and to add mass timber as an example of carbon-sequestering building materials in response to public input on the draft plan. This measure also received public input encouraging building reuse, which will be considered within the decision-making methodology to be developed in BE 6c, and on material reuse and deconstruction, which is addressed in Sustainable Materials Management Measure 7.



*About 8 percent of global emissions caused by humans come from the cement industry. Effective strategies are available to minimize the global warming potential of concrete.*

## Metrics and Outcomes

This measure will be evaluated by assessing the establishment of contracting language to support implementing these initiatives as well as by the number of projects successfully implementing these initiatives. The intended outcome is to cost-effectively minimize fossil fuel use in the production of materials used in County construction projects, as well as minimize on-site diesel emissions from construction vehicles and equipment.

## BE 8: Carbon Sequestration

**Remove climate-warming pollutants from the atmosphere by sequestering carbon through landscape management best practices.**

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Leverage grants and partnerships to increase the capacity of County agencies to accelerate planting biodiverse, native, low-pollen trees on County-managed lands in a manner consistent with local and state policies, such as the County’s Bay-Friendly Landscaping policy. Prioritize planting at facilities located in heat-vulnerable communities in the County.</p>	<p><b>GSA-Sustainability</b> GSA-BMD PWA</p>	<p>GHG:  <b>Community/Global</b></p> <p>Resilience:  <b>Community</b></p>	<p>Capital: Current  + </p> <p>Personnel:  <b>Existing</b></p>	<p> <b>Frontline Community Benefits</b> <b>Natural Resources Protection</b></p>
<p>b. Develop a pilot program in partnership with local agencies to apply compost on County-owned landscapes for carbon farming purposes and assess its efficacy in achieving carbon storage.</p>	<p><b>GSA-Sustainability</b> GSA-BMD PWA</p>	<p>GHG:  <b>Community/Global</b></p>	<p>Capital: Current  + </p> <p>Personnel:  <b>Existing</b></p>	<p> <b>Natural Resources Protection</b></p>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>c. Continue to minimize the use of synthetic fertilizers in favor of compost and mulch application and to implement integrated pest management (IPM) and vegetation management practices to minimize herbicide and pesticide use in alignment with the Board-adopted IPM policy.</p>	<p><b>GSA-BMD</b> <b>PWA</b></p>	<p>GHG:  Supply Chain</p>	<p>Capital: Current </p> <p>Personnel:  Existing</p>	<p> <b>Health and Safety</b> <b>Natural Resources Protection</b></p>
<p>d. Require all capital projects with budgets of more than \$5 million where renewable energy infrastructure cannot be installed to maximize tree planting on-site.</p>	<p><b>GSA-Sustainability</b> <b>GSA-Capital Programs</b> GSA-BMD GSA-Capital Planning GSA-Energy</p>	<p>Resilience:  Community</p>	<p>Capital: Current </p> <p>Personnel:  Existing</p>	<p> <b>Natural Resources Protection</b></p>

## Background and Description

Carbon sequestration is the removal of carbon dioxide from the atmosphere. This occurs naturally in many ways, for example, when trees take in CO<sub>2</sub> from the atmosphere to grow or when organic matter is incorporated into soils. Carbon sequestration is an essential part of achieving carbon neutrality goals to balance fossil carbon emissions.

Efforts in this measure will build on existing County practices, which include integrated pest management best practices, such as using goat herds or mechanical means to manage vegetation overgrowth, and using compost and mulch to minimize chemical use in landscapes owned and managed by the County. Implementation of this measure will also support County compliance with state regulations (SB 1383, Lara, Chapter 395, Statutes of 2016) that require jurisdictions in California to procure a target amount of compost and mulch in furtherance of the state's goal to minimize short-lived climate pollutants, particularly methane.

## Vision 2026 Alignment

This measure aligns with the Healthy Environment and Safe and Livable Communities vision elements and advances the Accessible

Infrastructure 10X goal by removing climate-warming pollutants from the atmosphere through landscape management practices and will benefit the community by increasing shade trees and healthy soil.

### Equity Description

Research indicates that access to nature is linked to positive health outcomes, and that improving tree cover in urban areas can reduce heat gain known as the heat island effect and provide respite on high-heat days. It is also important to acknowledge that tree planting can enhance the aesthetics of a community and lead to green gentrification, whereby property values increase and risk the displacement of long-standing community members. Application of the equity tool highlighted these important equity factors related to this measure.

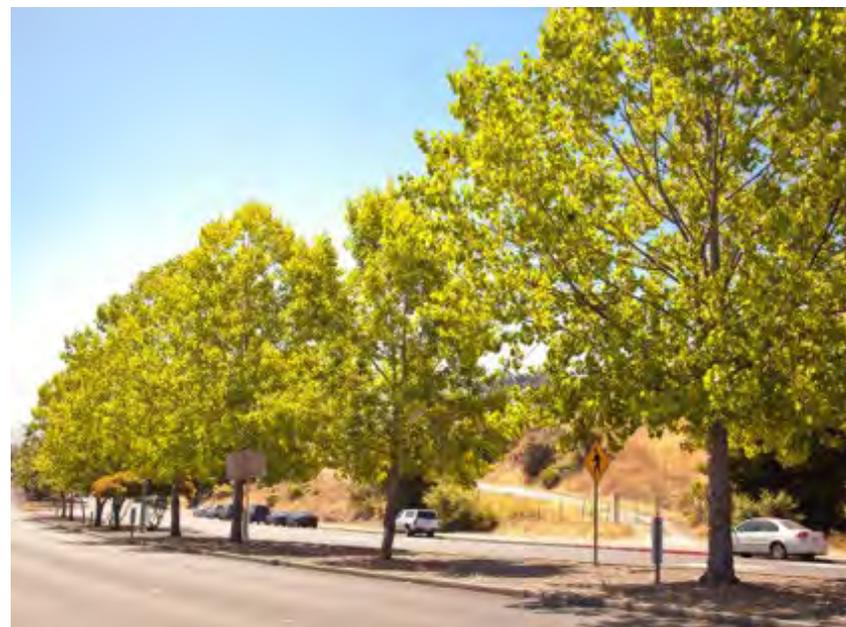
With this in mind, our team added a prioritization to focus investments where they could benefit heat-vulnerable communities most affected by climate change. Additionally, the trees planted are specified as low-pollen to minimize the adverse health impacts on community members with asthma.

### Community Engagement

At our community workshops, we heard a strong desire from participants to see the County invest in planting more trees to sequester carbon from the atmosphere, creating more green space for community gatherings, and increasing shading to reduce the heat island effect. This input informed prioritizing planting in communities that lack tree cover. Moreover, the door-to-door survey revealed a clear theme of desiring more parks and green space.

### Metrics and Outcomes

This measure will be evaluated by tracking the number of trees planted and the amount of compost and mulch used over time with the goal of increasing each. The intended outcome is to cost-effectively sequester carbon through enhanced landscape management practices.



## Prepare the Portfolio

### BE 9: Climate Resilience for the Building and Infrastructure Portfolio

Consider and address a range of climate risks when making infrastructure decisions across the portfolio to ensure the County’s buildings and critical infrastructure maximize community resilience in a changing climate. Prioritize investments for essential services to frontline communities and where historical injustices have contributed to disproportionate climate burdens.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Develop and adopt a standardized approach and set of decision-making tools to incorporate climate resilience planning and design into facility decisions by the end of 2024, building on state guidance. The approach and tools should be informed by community input, center equity, and include economic assessment tools, climate projections, and other relevant data.</p>	<p><b>GSA-Capital Planning</b> GSA-Capital Programs GSA-Sustainability Advisor: PWA</p>	<p>—</p>	<p>Capital: <b>Current</b>  +   </p> <p>Personnel:    </p> <p><b>Existing</b></p>	<p> <b>Frontline Community Benefits</b></p>
<p>b. Assess the climate-related vulnerability of the existing facility portfolio and physical infrastructure by incorporating criteria into the real estate master planning and facility condition assessment processes. Prioritize review of critical facilities and infrastructure, with a focus on maintaining continuity of operations in facilities serving communities on the frontline of climate change.</p>	<p><b>GSA-Capital Planning</b> <b>PWA</b> GSA-Sustainability</p>	<p>Resilience:  <b>County Operations</b></p>	<p>Capital: <b>Current</b>  +   </p> <p>Personnel:    </p>	<p> <b>Frontline Community Benefits</b></p>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>c. Use the approach and set of decision-making tools in Submeasure a within strategic planning and investment decision-making processes, such as the portfolio capital planning strategy, capital improvement planning, real estate master plan, and other funding and financing decisions for use of County and Flood Control District funds for infrastructure.</p>	<p><b>GSA-Capital Planning</b>  <b>PWA</b>                      GSA-Energy                      GSA-Sustainability</p>	<p>Resilience:    <b>County Operations</b></p>	<p>Capital:  <b>Current</b>   +   </p> <p>Personnel:       <b>Existing</b></p>	<p>  <b>Frontline Community Benefits</b></p>
<p>d. Develop and update building and infrastructure ordinances (including the green building ordinance), design standards, specifications, and operating practices to ensure climate resilience of the assets with priority given to green infrastructure or green-gray hybrid solutions.</p>	<p><b>GSA-Sustainability</b>                      GSA-BMD                      GSA-Capital Planning                      GSA-Capital Programs                      Advisor: PWA</p>	<p>Resilience:    <b>County Operations</b></p>	<p>Capital:  <b>Current</b>   +   </p> <p>Personnel:       <b>Existing</b></p>	<p>  <b>Natural Resources Protection</b></p>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>e. Complete climate risk assessments for capital project investments including (1) new facilities and infrastructure, (2) facilities considered for purchase or lease, and (3) any facilities or infrastructure considered for capital renovations using the approach and decision tools in Submeasure a. Include findings in an evaluation that combines climate projections with equity considerations to decide whether the project should be built, purchased, or renovated beginning in 2025. For major renovation projects that move forward, include as part of the project cost-effective options to increase the facility's or infrastructure's resilience to all natural hazards, including climate impacts.</p>	<p><b>GSA-Capital Planning</b> <b>PWA</b> GSA-Real Property</p>	<p>Resilience:  <b>County Operations</b></p>	<p>Capital: <b>Current</b>  +   </p> <p>Personnel:     <b>Existing</b></p>	<p> <b>Return on Investment</b></p>
<p>f. Develop a list by the end of 2024 (to prepare for funding opportunities) of strategic projects to improve the climate resilience of existing facilities and infrastructure with a focus on distributed clean energy resources, water efficiency and reuse, and other key opportunities related to wildfire, flooding, and other climate-related impacts. Prioritize the list of assets for the County's use that serve as resilience hubs or inclement weather centers for frontline communities, provide critical services in times of emergencies, or where the County is in charge of care and custody.</p>	<p><b>GSA-Energy</b> <b>PWA</b> GSA-BMD GSA-Capital Planning GSA-Capital Programs</p>	<p>Resilience:  <b>County Operations</b></p>	<p>Capital: <b>Current</b>  +   </p> <p>Personnel:     <b>Existing</b></p>	<p> <b>Frontline Community Benefits</b> <b>Return on Investment</b></p>

## Background and Description

Ensuring that the County's buildings and infrastructure can withstand, quickly recover from, and adapt to climate hazards (including wildfires, smoky air, flooding, sea level rise, and heat waves, as well as related events like public safety power shutoffs) is critical to our ability to provide essential services during and right after disruptive climate events with minimal, if any, downtime or costs associated with repair. Resilience actions can also result in safer indoor working conditions for County staff during these times. Recent extreme events in the Bay Area, such as the 2017 heat wave that resulted in 14 deaths, the 2020 wildfires that turned skies orange, and the 2021 "bomb cyclone" that caused mudslides and flooding due to unusually heavy rainfall over a short time, provide a glimpse of what is to come and the challenges facing buildings and infrastructure. Investing in our facilities and infrastructure now can lower costs to the County in the long run. Indeed, the state's [Climate Adaptation Strategy](#) states that "Well-established estimates used in the United States suggest that on average every \$1 invested in proactive efforts to reduce climate risk avoids at least \$6 in future costs to respond to such risks."

Implementation of this measure will incorporate climate-related risks into key decision points for building and infrastructure decision-making, including needs identification (policies and plans, prioritization), planning (financing, feasibility, preparation), delivery (design, procurement, construction), and management (operations and maintenance, decommissioning and handover). It will also prepare the County for future funding opportunities by developing a list of priority projects now to advance resilience of existing buildings and infrastructure.

These actions are consistent with and build on the climate-related priority actions identified in the 2022 [Alameda County Local Hazard Mitigation Plan](#). This measure was developed with the following guiding principles in mind:

- Prioritize green infrastructure and facilities and infrastructure that serve frontline communities or provide essential community services.
- Employ an adaptive design and management approach.
- Use updated economic assessments to account for costs of climate change and benefits of climate resilience over the life of the project.
- Apply a multihazard approach.
- Consider cascading effects of climate change impacts.



*County libraries, including the San Lorenzo Library, provide safe places for many residents during climate shocks like heat waves and days with poor air quality due to wildfire smoke.*

## Vision 2026 Alignment

This measure aligns with the Healthy Environment, Safe and Livable Communities, and Thriving and Resilient Populations vision elements and advances the Accessible Infrastructure and Crime Free County (Emergency Management) 10X goals by improving the resilience of County facilities and infrastructure, which will enhance the County's ability to deliver on our core mission of serving our community.

## Equity Description

Application of the equity tool highlighted the connection between the resilience of County buildings and infrastructure and our ability to continue providing critical services to our community, including those most affected by climate change. The measure language was edited to focus on improvements that provide the largest benefits to these communities, by adding “maximize community resilience in a changing climate” and “Prioritize investments for essential services to frontline communities and where historical injustices have contributed to disproportionate climate burdens.” In addition, BE 9a was updated to include community input and an equity focus in the development of the approach and tools, and BE 9b was updated to add a focus on maintaining continuity of operations in facilities serving communities on the frontline of climate change.

## Community Engagement

Ensuring the resilience of County infrastructure and buildings was consistently identified as an important priority throughout all community engagement results. The public survey results indicated that 65 percent of respondents were very concerned about maintaining resilient County services, and half of all respondents indicated that they were invested in maintaining the climate resilience of County vendors. County employees showed similar support through the employee climate survey, with nearly half of the respondents indicating support for the County preparing our services and employees to be resilient in a changing climate. Focus group respondents went further, indicating that equity should be centered in decisions on resilience of County operations. Seventy-five percent of door-to-door survey respondents agreed that disaster preparedness and resilience are very important.

## Metrics and Outcomes

Implementation of this measure will be evaluated based on successfully developing appropriate planning tools and applying those tools to portfolio and infrastructure decision-making processes.

## BE 10: Manage Lands for Climate Resilience

**Bolster resilience of County-owned and -managed assets by ensuring that County-owned and -managed lands and rights-of-way are developed and conserved, and operated and maintained, in ways that maximize their resilience to climate hazards.**

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
a. Develop a strategic plan for the development of new renewable energy systems on County-owned lands or other brownfields (priority) or greenfield sites.	<b>PWA</b> <b>PWA-Flood</b>	GHG:  County Operations  Resilience:  County Operations	Capital: Current  +     Personnel:     Existing	  Health and Safety Return on Investment
b. Recommend policy for inclusion in County's legislative platform that allows municipalities and special districts to sell excess renewable energy to the grid.	<b>PWA</b> GSA-Sustainability	—	Capital: Current  +     Personnel:     Existing	 Return on Investment
c. Develop and implement policy to avoid development in flood-prone areas, and ensure development that does occur in flood-prone areas provides for implementation of future flood mitigation by the developer.	<b>PWA</b>	Resilience:  Community	Capital: Current  +     Personnel:     Existing	 Health and Safety

## Background and Description

State policy currently does not allow special districts to sell back power, making the development of renewable energy on public lands cost prohibitive. This measure seeks to advocate for changes to state policy and prepare for such changes by creating a plan for implementing renewable energy infrastructure if it becomes economically feasible, prioritizing development of such infrastructure in previously developed areas (brownfields) over undeveloped areas (greenfields).

Alameda County is projected to experience changes in rainfall precipitation patterns and tidal water flows due to sea level rise linked to climate change. This measure seeks to strengthen policies to avoid development in flood-prone areas where appropriate, and to use assessment tools, such as geologic hazard abatement districts, where there may be future need for infrastructure.



## Vision 2026 Alignment

This measure aligns with the Healthy Environment and Safe and Livable Communities vision elements and advances the Accessible Infrastructure and Crime Free County (Emergency Management) 10X goal by improving the resilience of County-owned and -managed lands.

## Equity Description

Unhoused individuals and low-income populations who live in flood-prone areas have few, if any, resources to protect themselves from flooding, and protection of these populations would fall to the County during flood events. Application of the equity tool reinforced the need to thoughtfully consider future flood projections to avoid maladaptive development that limits future climate hazard mitigation efforts.

## Community Engagement

Ensuring the resilience of County infrastructure was consistently identified as an important priority throughout all community engagement results. In both the community and employee climate surveys, the majority of respondents indicated that they wanted the County to establish renewable energy infrastructure and enhance infrastructure to support communities throughout the County. Measure BE 10c was modified to include stronger language to discourage development in flood-prone areas in response to public input on the draft plan.

## Metrics and Outcomes

This measure will be assessed based on whether submeasures are accomplished.

### BE 11: Water Conservation and Drought Preparedness

Analyze the potential for drastic reductions of potable water use in buildings and landscapes, and develop a plan by the end of 2024 to achieve those reductions to minimize water-related energy use (process, heat, and delivered water) and guard against drought-related impacts.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
a. Continue to specify highly efficient fixtures, equipment, and heating and cooling systems in construction and maintenance projects to minimize demand for water use in facilities and assess opportunities to upgrade existing fixtures and equipment.	GSA-BMD GSA-Capital Programs GSA-Energy	Resilience:  County Operations	Capital: Current  +  Personnel:     Existing	 Natural Resources Protection
b. Continue to incorporate water-smart landscaping and irrigation design (such as native and drought-tolerant plants and smart irrigation technologies and practices) into newly constructed landscapes to minimize water use, and assess opportunities in existing landscapes to transition ornamental lawn areas to water-smart landscapes and to upgrade existing fixtures and equipment.	GSA-BMD GSA-Energy PWA	Resilience:  County Operations	Capital: Current  +    Personnel:     Existing	  Natural Resources Protection Return on Investment

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>c. Develop and implement design guidelines for new construction and major renovations that require consideration of design strategies producing alternative water for non-potable uses on-site, including reuse of reclaimed water, gray water, and harvested rainwater.</p>	<p><b>GSA-Capital Programs</b> <b>GSA-Energy</b> GSA-BMD</p>	<p>Resilience:  County Operations</p>	<p>Capital: Current  +   </p> <p>Personnel:     Existing</p>	<p> Natural Resources Protection Return on Investment</p>
<p>d. Audit existing buildings to understand the biggest opportunities for reclaimed water use and implement cost-effective projects as funding is available.</p>	<p><b>GSA-Energy</b> GSA-BMD GSA-Capital Programs</p>	<p>Resilience:  County Operations</p>	<p>Capital: Current  +   </p> <p>Personnel:     Existing</p>	<p> Natural Resources Protection</p>
<p>e. Continue to implement state regulatory requirements for landscapes to retain stormwater and allow infiltration of the water into the ground through bioswales, permeable surfacing, rain gardens, and other best management practices.</p>	<p><b>GSA-Capital Programs</b> <b>PWA</b> GSA-BMD GSA-Sustainability</p>	<p>Resilience:  County Operations</p>	<p>Capital: Current  +   </p> <p>Personnel:     Existing</p>	<p> Natural Resources Protection</p>
<p>f. Install water submeters in facilities to monitor usage and promptly address leaks and operational issues. Establish operation and maintenance procedures to maximize continued water use efficiency and conservation.</p>	<p><b>GSA-BMD</b> <b>GSA-Energy</b></p>	<p>Resilience:  County Operations</p>	<p>Capital: Current  +   </p> <p>Personnel:     Existing</p>	<p> Natural Resources Protection Return on Investment</p>

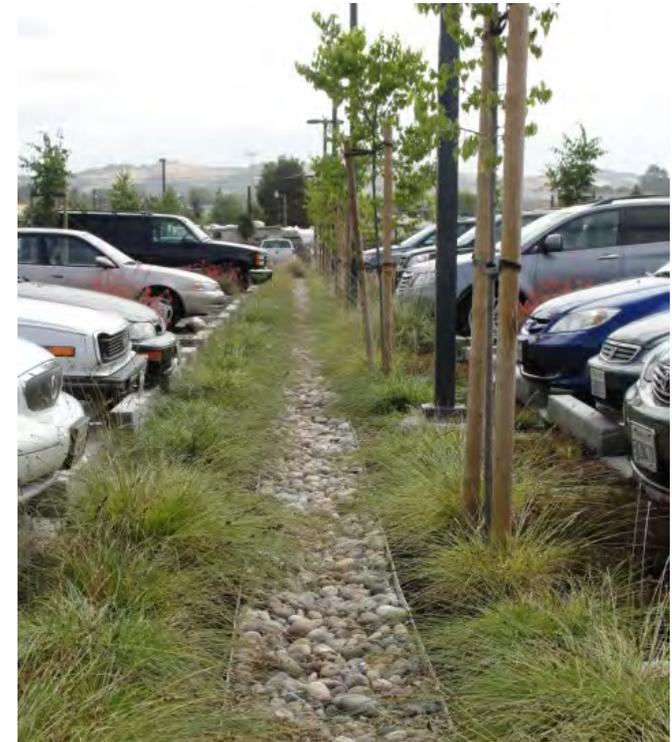
## Background and Description

Delivery of water for building or landscape use is inherently energy intensive, requiring energy to transport, pump, and heat for domestic use. Water conservation measures ensure we use water most efficiently, resulting in fewer greenhouse gas emissions from this source. In addition, Alameda County is experiencing increasingly common drought conditions due to higher temperatures and reduced precipitation caused by climate change. In fact, California has experienced drought for 15 of the past 20 years. California projects in its [Climate Adaptation Strategy](#) that drought conditions will continue to worsen with the increase of heat-trapping greenhouse gas emissions. This will increase temperatures and change precipitation patterns, affecting reservoir water storage, groundwater recharge, and the Sierra Nevada snowpack, which has traditionally provided approximately one-third of water storage needs statewide.

This measure builds on current programs and practices at the County. Our Board of Supervisors adopted the Green Building Ordinance for County Facilities ([O-2003-63](#)) in 2003 and the Bay-friendly Landscaping Resolution ([R-2008-222](#)) in 2008, both of which encourage and require practices that conserve water. In recent years, the County has begun transitioning our kitchen and restroom faucets to automated low-flow equipment, added automated flushing urinals, and replaced water fountains with bottle fillers. County facilities at our City of Dublin campus use reclaimed water provided by the local water district, commonly referred to as purple pipe water, for our landscape water use. We have an award-winning demonstration project at our Public Works Corp Yard parking area, which includes 14 low-impact development and stormwater treatment measures to reduce water use and recharge local aquifers.

## Vision 2026 Alignment

This measure aligns with the Healthy Environment vision element by reducing the amount of potable water used at County facilities and landscapes to adapt to drier conditions and guard against drought-related impacts.



*A bioswale in Castro Valley Library parking lot channels stormwater to remove pollution, reduce runoff, and allow water to absorb into the ground.*

## Equity Description

With water resources dwindling across the state, the County must lead by example and do our part to reduce our water use and use alternative sources whenever possible.

## Community Engagement

Seventy-six percent of public survey respondents indicated that they were concerned about drought in Alameda County. In open-ended responses from the public survey, respondents indicated that they were invested in reducing water use. Additionally, in the community workshops, community experts indicated that water efficiency, water harvest, and gray water reuse were important levers for ensuring that drought conditions are managed in California. On the online feedback forum, the average priority rating for this measure was 87 on a scale of -100 to 100, indicating water conservation is important to respondents. Measure BE 11b was modified to specifically call out replacement of ornamental lawns as a strategy for reducing water use in landscapes in response to public input on the draft plan.

## Metrics and Outcomes

Successful outcome of this measure will be determined by tracking and reporting metered water use across our operations, including facility and landscape water use. We will also track the number of projects that implement strategies to use alternative sources of water and those that allow for stormwater capture or infiltration.

# Community Resilience

## MEASURES

### County System Preparedness

- CR 1: Resilient Emergency Management
- CR 2: Outreach and Communications
- CR 3: Resilient Health and Social Services

### Community Preparedness

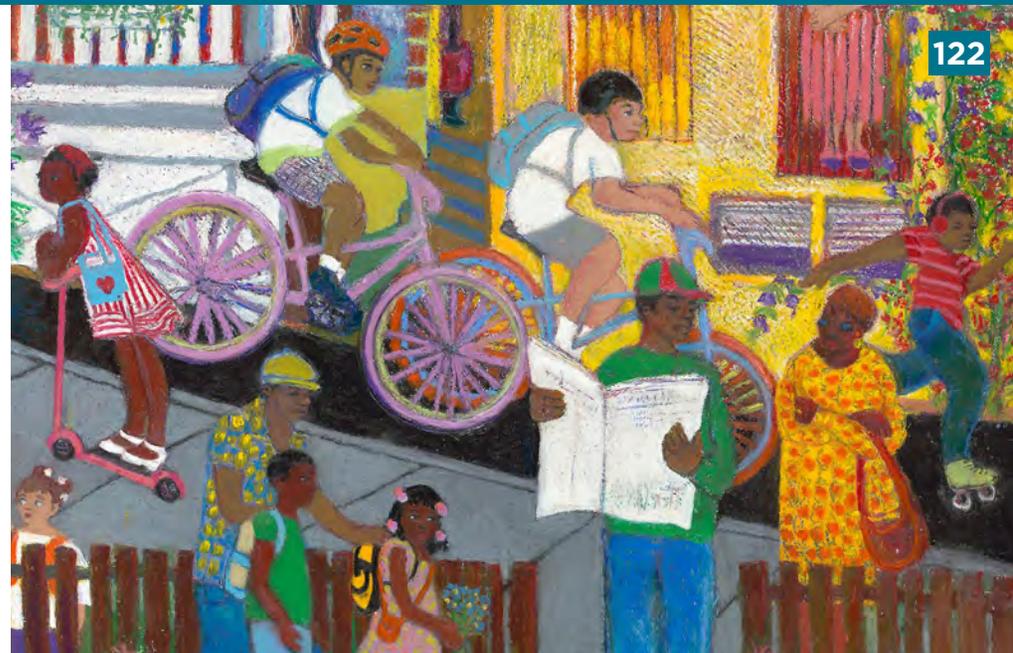
- CR 4: Resources for Resilience
- CR 5: Place-Based Resilience
- CR 6: Mental Health and Resilience

### External Coordination

- CR 7: Regional Resilience
- CR 8: Equitable Community Engagement

### Specific Impact Readiness

- CR 9: Reduce Fire Risk
- CR 10: Flood Control



This section covers how we will increase the resilience and preparedness of the communities

we serve to protect from climate shocks like heat waves, wildfires, or flooding.

## Section Introduction

### Description

A critical component of the County's mission is providing community services, including emergency preparedness and response, health and social services, fire prevention, firefighting, waterways management, and flood control. Climate change impacts, such as higher wildfire risk due to drier conditions, are already affecting County residents, exacerbating the need for these services and straining County staffing and resources. The County has an essential role to play in supporting the climate resilience of our community, and these services form the backbone of our preparedness and our response.

The Intergovernmental Panel on Climate Change defines climate resilience as the “capacity of social, economic, and environmental systems to cope with a hazardous event or trend or disturbance, responding or reorganizing in ways that maintain their essential function, identity, and structure, while also maintaining the capacity for adaptation, learning, and transformation.” The County has begun the work of advancing resilience for our community. In 2019, the Board of Supervisors adopted a Resolution Endorsing the Declaration of a Climate Emergency ([R-2019-375](#)) which committed the County to bold resilience efforts for our most vulnerable communities. The Alameda County Climate Action Plan for Government Services and Operations Through 2020 included a Beyond Reductions section with a brief discussion of adaptation to a changing

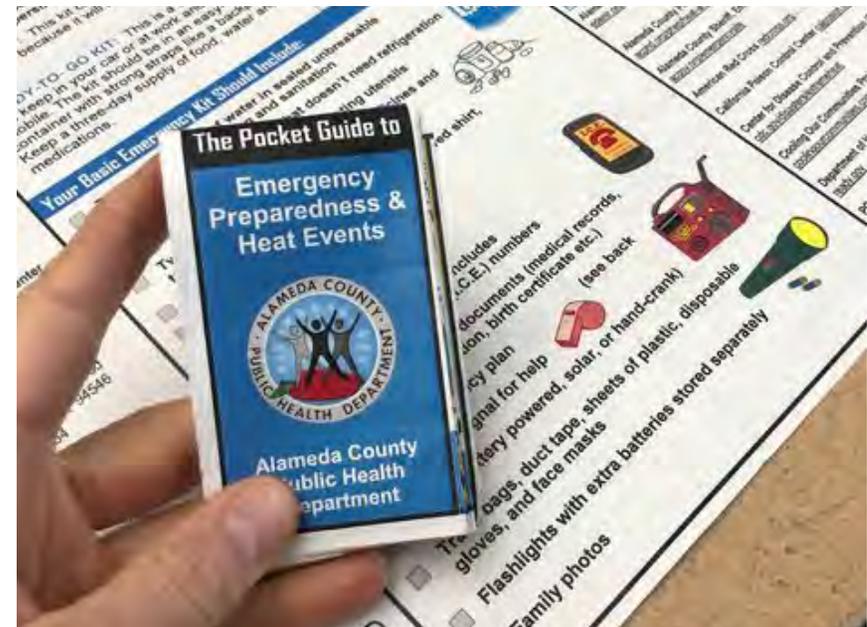


climate. During the implementation period for the last plan, the Sustainability Team completed a vulnerability assessment, which explored the county's resilience to climate change across several key sectors and identified opportunities for building resilience (see the Resilience Assessments section in the Plan Overview: Goals and Principles for details). Stakeholders from several agencies also launched focused adaptation projects on topics ranging from wildfire smoke and extreme heat to sea level rise. More information about the resulting projects can be found on our [website](#).

Now, over a decade later, climate change's effects have become more frequent and intense, disproportionately

harming frontline populations—those affected first and worst by climate emergencies and other impacts—including low-income communities, communities of color, our unhoused population, older adults, and people with disabilities. Additionally, the COVID-19 pandemic has disproportionately harmed the same frontline populations, and County resources have been stretched thin as we continue to respond to both crises simultaneously. The pandemic has illuminated the necessity of resilient County operations and services in emergencies, and the lessons learned informed this action area section. Community resilience to the wide variety of climate change impacts will also contribute to overall resilience to and preparedness for other threats, whether unexpected or expected. Parallel trends, such as increased economic inequality, the aging of our county population, and increasing housing displacement, can also affect the same community members and create a greater need for resilience programs.

The State's 2021 Climate Adaptation Strategy also promotes partnership and collaboration for climate adaptation and resilience. Coordination is beneficial within the County between agencies with distinct roles that must work in concert to help protect our communities. The COVID-19 pandemic underscored the importance of internal coordination and role clarification for response to an unexpected threat. When County staff coordinate across internal functions and with community organizations and efforts, projects can maximize success and focus resources where they are most needed.



The initiatives in the Community Resilience section build off these previous and current efforts to prepare our communities for climate change. These measures provide concrete actions to guide County staff and decision-makers to anticipate and invest in the public services County agencies need to provide during climate emergencies.

### Greenhouse Gas Reductions

Actions in the Community Resilience section are geared toward preparing for and responding to climate change consequences. Greenhouse gas emissions reductions are not the primary goal. However, there are opportunities for

greenhouse gas reductions within resilience efforts, such as supporting home weatherization for community members that will help them reduce energy use and protect their household from climate shocks, including heat waves.

### Resilience Benefits Overview

The measures in this section focus on increasing the resilience of the county community by investing in County departments to plan and prepare for the services needed during and after climate change-related disasters or other impacts. Even if the world stopped emitting greenhouse gases today, excessive heat, skies turned orange by wildfire smoke, atmospheric rivers, unprecedented storms, hazardous air quality, floods, and other climate impacts would not immediately cease. Therefore, investing in resilience measures is a vital piece of climate action.

Vulnerability to climate change is a function of the degree of exposure to the threat, sensitivity to the threat, and the capacity to adapt. Most actions in this section of the GOCAP are designed to strengthen the County or the community's capacities to adapt so that our systems and those we serve will be less vulnerable. Some actions are intended to address exposure to climate disruptions, like home weatherization or outreach to unhoused residents, and some seek to address specific groups' sensitivities to climate changes, such as older adults and those with asthma. For communities in Alameda County, the County is responsible for crucial elements of the social safety net, including statewide programs like CalFresh, CalWORKs, Medi-Cal, and County-run programs that benefit residents

and may play a key role in their resilience to climate-change-related threats. Agencies throughout the County, from the Sheriff's Office of Emergency Services (OES) to the Alameda County Library, will implement these measures. The measures aim to provide necessary resources and services for our communities, including strengthening safety net programs for climate change to build resilience and adaptive capacity.

### Equity Overview

The Community Resilience section focuses on engaging, serving, and investing in communities, especially frontline communities, regardless of immigration status. Therefore, the measures in this action area section pay special attention to serving and including communities disproportionately harmed by climate change. These include low-income communities, communities of color, unhoused residents, young children, older adults, and people with disabilities. During community engagement activities for the plan's development, organizations and residents expressed particular interest in the community resilience measures. The County devoted additional resources to hearing from the public and frontline groups, since our efforts will be most effective if they reflect the needs of the community being served.

Two critical dimensions of equity in emergency management and communication include the mode and language of information shared. As public jurisdictions learned in the pandemic, public health or safety messages can miss their targets if not delivered via a trusted channel

or conduit, on an established or well-used platform, and in accessible language and format. Community members may lack access due to technology, visual or hearing impairments, languages spoken, or trust barriers. The measures in this section seek to reflect the need for multi-platform, multilingual, culturally competent communications. A helpful touchstone can be the County’s “threshold” languages: the primary language of a significant portion of the Medi-Cal beneficiary population. In general, widely spoken languages should be considered, including Arabic, Cambodian/Khmer, Chinese, English, Farsi, Korean, Spanish, Tagalog, and Vietnamese. This list of languages can be revised to meet community needs and expanded upon for programming.

### Vision 2026 Alignment

Many of the measures in this section will help the County provide resources before and during climate events that harm physical and mental health, improve education and alert systems for communities before and during climate disasters, and prepare infrastructure like facilities in flood-prone areas to be more resilient against sea level rise and flooding. These outcomes support three Vision 2026 10X goals—Healthcare for All, Crime Free County, and Accessible Infrastructure—and the Vision 2026 elements of a Thriving and Resilient Population and Safe and Livable Communities.

### Monitoring and Reporting

The State of California has set out to provide frameworks



*County employees participate in a Golden Eagle Exercise, which simulates a disaster event to test responses of an activated emergency operations center, giving staff practice at crucial roles that help keep the county safe.*

for state and local government agencies as they set measurable goals for community resilience. While metrics and indices for resilience have been developed for the city or neighborhood level, available frameworks do not focus on outcomes that could be influenced by County action alone, and therefore are of limited utility to the work of this plan. Resilience metrics are a developing field, and we set out in this section of the GOCAP (CR 3j) to develop a comprehensive approach to measuring resilience across County stakeholder agencies. While these are developed, the measures in this section will be evaluated based on key metrics selected by relevant stakeholders.

## Measures

### County System Preparedness

#### CR 1: Resilient Emergency Management

Meaningfully, consistently, and equitably integrate climate resilience into emergency management efforts across the County’s functions, with input from the most at-risk communities, regardless of immigration status.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Write and vet three priority emergency plans addressing climate-related impacts. Can include updates/annexes of current plans. Integrate agency role clarity, regular updates, staff training, and supplies protocols.</p>	<p><b>ACSO-OES</b> GSA-Sustainability SSA HCSA</p>	<p>Resilience:  <b>Community</b></p>	<p>Capital: Current  +   </p> <p>Personnel:    </p>	<p> <b>Health and Safety</b></p>
<p>b. Augment exercises and training for emergency management staff, disaster service workers (DSWs), and client-facing program staff with appropriate inclusion of climate-related threats. Train staff in emergency management data and IT systems.</p>	<p>ACSO-OES GSA-Sustainability Fire HCSA HRS PWA SSA</p>	<p>Resilience:  <b>Community</b></p>	<p>Capital: Current  +   </p> <p>Personnel:    </p>	<p> <b>Health and Safety</b></p>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>c. Augment training for the public in community safety, emergency preparedness, and response with appropriate inclusion of climate-related threats.</p> <ul style="list-style-type: none"> <li>i. Offer these training resources to organizations engaged in community safety, such as Alameda County Volunteer Organizations Active in Disasters (VOAD).</li> <li>ii. Refresh or establish plans, policies, and procedures for long-term recovery groups providing post-disaster services to convey best practices and address the needs of the most at-risk residents.</li> <li>iii. Offer public training and resources in the County’s threshold and widely spoken languages.</li> </ul>	<p><b>ACSO-OES</b>                      Fire                      HCSA                      GSA-Sustainability</p>	<p>Resilience:    <b>Community</b></p>	<p>Capital:                      Current   +   </p> <p>Personnel:     </p>	 <b>Health and Safety</b>
<p>d. Establish a cross-agency County team to aid disaster preparedness, response, and recovery that will include climate-related impacts.</p>	<p><b>ACSO-OES</b>                      Fire                      GSA-Logistics                      GSA-Sustainability                      HCSA                      SSA</p>	<p>Resilience:    <b>Community</b></p>	<p>Capital:                      Current   +   </p> <p>Personnel:     </p>	 <b>Health and Safety</b>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>e. Conduct targeted assessments to identify the populations within the county that are most vulnerable to climate-related emergencies, including assets. Share and work cross-agency to consult assessment results in emergency planning so that emergency response will meet community needs, regardless of immigration status. Share results to inform prioritization of County facilities for resilience and sustainability upgrades.</p>	<p>ACSO-OES GSA-Sustainability HCSA SSA</p>	<p>Resilience:  <b>Community</b></p>	<p>Capital: <b>Current</b>  +   </p> <p>Personnel:    </p> <p><b>Existing</b></p>	<p> <b>Health and Safety</b></p>
<p>f. Leverage participation in the Alameda County Emergency Managers' Association to share resources and collect input from the region's emergency managers regarding climate preparedness, protection, mitigation, response, and recovery.</p>	<p>ACSO-OES GSA-Sustainability HCSA</p>	<p>Resilience:  <b>Community</b></p>	<p>Capital: <b>Current</b>  +   </p> <p>Personnel:    </p> <p><b>Existing</b></p>	<p> <b>Health and Safety</b></p>
<p>g. Work with telecommunications providers, when appropriate, to give or expand priority to first responder and decision-maker communications during emergency situations in which telecommunications are disrupted.</p>	<p>Fire HCSA ITD PWA All as needed</p>	<p>Resilience:  <b>Community</b></p>	<p>Capital: <b>Current</b>  +   </p> <p>Personnel:    </p> <p><b>Existing</b></p>	<p>  <b>Flexible Services</b> <b>Health and Safety</b></p>

## Background and Description

Response to the most urgent climate change impacts often amounts to emergency management, a function the County has undertaken since it was founded. Climate change poses new threats, including planned public safety power shutoffs (PSPS), unhealthy air quality due to major wildfires, and increased heat waves. These unprecedented challenges require expansion of existing response systems to ensure the County is equipped to respond. They also require that the County deliver new types of preparedness information to the public. Beginning in 2017, the County has undertaken emergency planning and protocol development, establishment of cross-agency initiatives, and pilots of training sessions for community-based organizations, all focused on new, climate change-specific threats such as planned power shutoffs and wildfire smoke. The COVID-19 pandemic response has also highlighted the necessity of preparedness, including upgrading coordination across agencies within our emergency management and response functions. Through this measure, the County will continue to invest in resilient, updated emergency management functions and coordination, allowing us to adapt to regional threats.



## Vision 2026 Alignment

This measure aligns with the Crime Free County 10X goal, as it strengthens disaster mitigation, preparedness, response, and recovery for climate emergencies.

## Equity Description

Some populations are less able to invest in preparedness for climate emergencies than others, live in more vulnerable areas, and may not be easy to reach via existing County communication channels. These populations include but are not limited to people and households with limited income, access and functional needs (AFN) populations, non-English speakers, unhoused residents, older adults, people with disabilities, children, and people with barriers to transportation. Therefore, we explicitly included a submeasure to ensure that emergency response considers these individuals' needs.

Evaluation of this measure using the equity tool led to adding training for community-based and nongovernmental organizations working on community safety, which can help make response and communication efforts accessible to our communities.

## Community Engagement

Feedback from the public survey showed that County residents wanted resources to help them prepare for climate impacts, which is addressed by the submeasure to create training for the public. However, feedback from the targeted community engagement effort revealed that not all County resources and services reach the populations that need them most, so stakeholders incorporated a submeasure to expand training and resources for these populations. In the employee climate survey, employees recommended ensuring that “County staff are adequately prepared for how climate emergencies could require their support as disaster service workers.” Such preparations are addressed by the staff and disaster service worker training submeasure.

Survey participants expressed an interest in cross-institutional collaboration. County staff will use our participation in the Alameda County Emergency Managers’ Association to align and join efforts and share information with regional cities and other jurisdictions.

Online feedback forum participants noted that County assessments to identify climate-vulnerable communities could take a long time and produce results already known from prior data. In response, stakeholders added language to emphasize efficient assessments and the wide sharing of assessment results.

## Metrics and Outcomes

This measure will be assessed based on whether submeasures are accomplished. Metrics such as assessments, plans, or annexes completed will be considered by implementing agencies.

## CR 2: Outreach and Communications

**Equitably and accessibly expand and target climate resilience outreach to the public, especially to county residents most affected by climate change.**

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Reach people with information about climate-related events, protective actions, and County-provided climate resources who have not historically been reached by County communication channels, including but not limited to unhoused populations, limited English proficiency (LEP) populations, and those without technology access or proficiency.</p> <p>i. Promote and share information through the “Community Partners” subscription housed in AC Alert so participating community partners can disseminate the information.</p> <p>ii. Partner with trusted community-based and faith-based organizations, 2-1-1, the County Office of Education, schools, childcare, and youth programs to communicate.</p> <p>iii. Leverage communication methods that do not rely on Internet access, such as radio, television, and billboards/ bench advertising.</p>	<p>ACSO-OES HCSA SSA</p>	<p>Resilience:</p>  <p>Community</p>	<p>Capital:</p> <p>Current</p>  <p>Personnel:</p> 	 <p><b>Frontline Community Benefits</b> <b>Health and Safety</b></p>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>b. Expand sharing of disaster preparedness, protective actions, and resilience and response information, including through printed material, radio broadcasts, text messages, video, websites, and other media. Information should be in accessible formats and additional languages spoken broadly in the county, including but not limited to Arabic, Cambodian/Khmer, Chinese, English, Farsi, Korean, Spanish, Tagalog, and Vietnamese.</p>	<p>ACSO-OES Fire HCSA SSA</p>	<p>Resilience:  Community</p>	<p>Capital: Current  +   </p> <p>Personnel:    </p>	<p>  Frontline Community Benefits Health and Safety</p>
<p>c. Invest in the accessibility and robustness of County virtual engagement protocols and technologies to support access to services in the context of climate disruptions.</p>	<p>ITD</p>	<p>Resilience:  Community</p>	<p>Capital: Current  +   </p> <p>Personnel:    </p>	<p>  Flexible Services Health and Safety</p>
<p>d. Establish a pilot resilience kiosk at a County Library location to help members of the public at all age levels understand air quality information in partnership with the Bay Area Air Quality Management District. Explore innovative offerings, such as hands-on project workshops. Conduct outreach to the public so people know they can come to a County Library location during bad air quality days.</p>	<p>Library</p>	<p>Resilience:  Community</p>	<p>Capital: Current  +   </p> <p>Personnel:    </p>	<p>  Frontline Community Benefits Health and Safety</p>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
e. Develop consistent standards for messaging accessibility. In advance, prepare and translate clear messaging and materials with guidance about anticipated threats. Coordinate internally and with partner jurisdictions to vet and disseminate messages.	ACSO-OES HCSA SSA	Resilience:  Community	Capital: Current  +    Personnel:     Existing	 Health and Safety
f. Maintain and expand coordination between all County public information officers and communications/alert system staff.	ACSO ACSO-OE Fire HCSA SSA	Resilience:  Community	Capital: Current  +    Personnel:     Existing	 Health and Safety

## Background and Description

Following the devastating California wildfires of 2017 and the smoke that blanketed the Bay Area, the County Office of Sustainability began outreach to agencies with missions related to climate impact resilience. In these discussions, public climate communications emerged as an area of work ripe for investment and coordination. Two initial projects, [Cooling Our Communities](#) and the [Alameda County Air Quality Communications Protocol](#), convened cross-agency partners to, among other actions, engage residents in guiding and driving communications about protective actions for climate-related disasters, including wildfire smoke and heat. The County’s health officer at the time, Dr. Erica Pan, noted that the coordination and role clarification from this climate work made the County more resilient to the COVID-19 pandemic. Clear, consistent, accessible, and relevant public messaging is a lynchpin climate resilience strategy to help our community members know how to protect themselves and be aware of resources.

## Vision 2026 Alignment

This measure aligns with the Vision 2026 10X goals of a Crime Free County, Healthcare for All, and Accessible Infrastructure. The measure aims to leverage and optimize the emergency mass notification system for improved safety, promote community awareness of how climate impacts can harm the health of residents, and support accessibility of County services, both digital and analog.

## Equity Description

Because many of the populations that climate change will most affect have historically been the least reached by County communications, this measure aims to improve accessibility of climate-related information for all, regardless of immigration status, while improving accessibility for communities most affected.

Application of the equity tool led to the addition of submeasures regarding advance preparation of materials and establishment of consistent standards across County communication functions for accessibility. The use of the tool also led to additional commitment to communication methods that do not rely on Internet access, which is also an example of lessons learned through the COVID pandemic and the exposure of the digital divide.

## Community Engagement

A sizeable majority of respondents to the public survey indicated that they would like to receive information via County emails (65 percent), local newspapers and news websites (45 percent), or neighborhood and community organizations (38 percent). As a result, stakeholders updated two submeasures to commit to using nontraditional and varied methods to communicate with the public about how to prepare for climate impacts and disasters. Using appropriate methods is important to reach communities that County communications have missed in the past, including but not limited to unhoused populations, limited English proficiency (LEP) populations, and those without technology access or proficiency.

Participants in the targeted community engagement efforts and the public survey shared that County communications on climate need to be accessible in multiple languages, so we incorporated language accessibility into this measure.

Participants in the first community workshop indicated they would like easier access to County employees and services, which validated the submeasure that invests in virtual engagement to maintain service during climate disruptions.

Participants in the first community workshop expressed a need for air quality monitoring and communication, supporting the aims of the submeasure on establishing a pilot resilience kiosk to share updates about current air quality. However, participants in the online feedback forum noted that a kiosk alone would not meet the full community need, including what to do during poor or bad air quality days. As one



Materials that share protective actions for heat resilience were translated into the County's widely spoken languages, including Arabic, to support broad access to climate information.

participant shared, “Getting the information out is so key. Not everyone has computers. Libraries and other public facilities would be good places for assistance to the public, but they are not always open.” Therefore, stakeholders augmented this submeasure to include broadly publicizing the availability of open Alameda County libraries as clean air centers during bad air quality days.

### Metrics and Outcomes

This measure will be assessed based on whether submeasures are accomplished. Metrics such as totaling the number of non-English climate messages disseminated, and the number of climate messages shared through the AC Alert Community Partners subscription annually, will be considered by implementing agencies.

## CR 3: Resilient Health and Social Services

**Ensure the County’s public health and social services are resilient to climate change and address the impacts of climate change on the health and well-being of service recipients, prioritizing those generationally impacted.**

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Mainstream resilience in public health programming, planning, and financing by ensuring that programs incorporate longer time frames and climate change-related health problems. Incorporate lessons learned during the COVID-19 pandemic to ensure that the County is prepared for future climate-related public health crises (including infectious disease outbreaks).</p>	<p><b>HCSA</b></p>	<p>Resilience:</p>  <p><b>Community</b> <b>County Operations</b></p>	<p>Capital:</p> <p>Current</p>  +    <p>Personnel:</p>    	 <p><b>Health and Safety</b> <b>Return on Investment</b></p>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>b. Incorporate an understanding of current and projected climate change impacts and disasters into any relevant updates of health emergency or response-related plans.</p>	<p><b>HCSA</b></p>	<p>Resilience:</p>  <p><b>Community</b> <b>County Operations</b></p>	<p>Capital: Current   +   </p> <p>Personnel:     </p>	 <p><b>Health and Safety</b></p>
<p>c. Provide guidance and resources to health care network partners for incorporation of climate change impacts into annual hazard vulnerability assessments, as appropriate.</p>	<p><b>HCSA</b> GSA-Sustainability</p>	<p>Resilience:</p>  <p><b>Community</b></p>	<p>Capital: Current   +   </p> <p>Personnel:     </p> <p><b>Existing</b></p>	 <p><b>Health and Safety</b></p>
<p>d. Assess the capacity of the public health system to respond to climate health impacts, such as increased chronic disease and infectious disease, especially among medically vulnerable populations, such as children and older adults.</p>	<p><b>HCSA</b></p>	<p>Resilience:</p>  <p><b>Community</b></p>	<p>Capital: Current   +   </p> <p>Personnel:     </p> <p><b>Existing</b></p>	 <p><b>Frontline Community Benefits</b> <b>Health and Safety</b></p>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>e. Guide and provide requirements to community-based organizations (CBOs) providing services to the County.</p> <p>i. Adopt and/or update memorandum of understanding and relevant contract language using climate-informed templates for organizations providing County-funded services to require clear emergency procedures, increase access to County-provided emergency planning resources, and develop a continuity of operations plan to continue or increase service during and after climate-related shocks.</p> <p>ii. Partner with CBOs to develop and implement climate resilience measures in contract language and/or memoranda of understanding.</p>	<p>ACSO GSA-Sustainability HCSA Probation SSA</p>	<p>Resilience:</p>  <p>Community</p>	<p><b>i.</b></p> <p>Capital: Current </p> <p>Personnel:  Existing</p> <p><b>ii.</b></p> <p>Capital: Current </p> <p>Personnel:  Existing</p>	 <p><b>Frontline Community Benefits</b> Health and Safety</p>
<p>f. Provide climate-ready training and preparedness resources to help medical care providers prepare for changes in patients' treatments necessitated by climate change (such as monitoring of medications that limit the body's ability to self-regulate heat).</p>	<p><b>HCSA</b></p>	<p>Resilience:</p>  <p>Community</p>	<p>Capital: Current </p> <p>Personnel: </p>	 <p><b>Health and Safety</b></p>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>g. Enhance surveillance and laboratory capacity to address changes in food and waterborne illness risk. Inform the regulated community, partner agencies, and community residents about the increasing risks of climate-related food and waterborne illness and measures to protect against them.</p>	<p><b>HCSA</b></p>	<p>Resilience:</p>  <p><b>Community</b></p>	<p>Capital:</p> <p>Current</p>  <p>Personnel:</p>  <p><b>Existing</b></p>	 <p><b>Health and Safety</b></p>
<p>h. Create position(s) within HCSA focused on climate change and health equity to support HCSA's emergency management functions to integrate climate change into agency efforts.</p> <p>i. Create an emergency response task force with representation from each HCSA department to lead centralization of processes and planning for climate change-related work.</p>	<p><b>HCSA</b></p>	<p>Resilience:</p>  <p><b>Community</b></p>	<p>Capital:</p> <p>Current</p>  <p>Personnel:</p> 	 <p><b>Health and Safety</b></p>
<p>i. Convene relevant partners for planning conversations and/or plan development to help the County be prepared for possible increases in climate migrants and displacements associated with disasters.</p>	<p>ACSO-OES HCSA SSA</p>	<p>Resilience:</p>  <p><b>Community</b></p>	<p>Capital:</p> <p>Current</p>  <p>Personnel:</p>  <p><b>Existing</b></p>	 <p><b>Frontline Community Benefits</b></p>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
j. Establish metrics for community resilience to climate impacts in Alameda County and pilot tracking and assessment based on these metrics.	ACSO-OES GSA-Sustainability HCSA SSA	Resilience:  Community	Capital: Current  +    Personnel:    	—

**Background and Description**

The County provides crucial health services and serves as a key part of the social safety net for our 1.6 million residents. County services will best benefit the public if they are accessible during a climate disaster or event. Because climate change impacts are numerous, and the scope of our health and social service systems is vast and varied, we have developed these measures to guide the work of increasing and continuing to invest in County services’ resilience. From our own community health programs to the hazard vulnerability assessments conducted by a network of health providers in the county, additional investments can help us work toward continuity of service operations in adverse circumstances. Our memoranda of understanding (3e), the recommendations provided by County health officers (3f), our understanding of food and waterborne illness risk (3g), and other pieces of County response and support systems can all be strengthened by understanding how climate change impacts will call on County agencies and their partners to respond, and a thoughtful application of climate change projections and best practices.

**Vision 2026 Alignment**

This measure aligns with the Healthcare for All and Eliminate Poverty and Hunger 10X goals, as it aims to enhance disease surveillance, prepare the public health system for climate impacts and disasters, invest in the social safety net, enhance the safety of specific climate-vulnerable populations, and create metrics for tracking and being accountable to resilience efforts.

**Equity Description**

Many county residents’ health is and will continue to be harmed by climate change, particularly people who are already medically vulnerable. For example, residents who require electricity for refrigeration of insulin or electricity to power health-related devices could be disproportionately burdened by public safety power shutoffs (PSPS) due to wildfire risk. This measure aims to enhance the resilience

and responsiveness of the County's health and social services to ensure the County can care for the well-being of all residents, especially those who need services most. Planning will help us be prepared to continue service in adverse conditions, such as having air filtration and indoor spaces available for residents seeking services or picking up food from commodity points of distribution (CPODs) or community partners, if the air is contaminated with wildfire smoke. This measure also aims to prepare services for incoming climate migrants and displaced County residents, who will have fewer resources and support than others.

## Community Engagement

Participants in our targeted community engagement effort noted that addressing climate impacts on health is important because this can address other aspects of climate resilience. Respondents to the public survey indicated that addressing climate change impacts on health was among the top priorities for the next three to five years, specifically the impact of extreme weather and poor air quality on public health. Additionally, 62 percent of the survey respondents had experienced discomfort from climate impacts such as extreme temperatures, and a majority of participants in the first community workshop indicated that they had experienced smoky air. One participant in the workshop shared, "I'm concerned for my child's health on poor air days and for those without purifiers or A/C." The goal of this measure is to ensure the resilience of health and social services to withstand climate-related disasters and respond to the community. We also heard from survey respondents and workshop participants that new diseases and pests due to climate change are a concern, which supports the inclusion of the submeasure on enhancing surveillance efforts to assess changes in illness risk.

Results from the employee climate survey showed that County employees had been faced with complex guidance to adapt to climate impacts and COVID-19, which can sometimes be similar enough to be confusing or difficult to convey to the public in simple language. For example, some masks protect wearers from COVID-19 but do not protect wearers from wildfire smoke. In response, we added language to one submeasure to provide guidance on balancing COVID-19 precautions with climate protections.

## Metrics and Outcomes

This measure will be assessed based on whether submeasures are accomplished. Metrics such as numbers of County and external provider programs informed by climate change projections and best practices will be considered by implementing agencies.



*Staff convened to advise on wildfire smoke communications, resulting in a working group that developed new climate educational materials for clients and the public.*

## Community Preparedness

### CR 4: Resources for Resilience

Support the most-affected community members with resources at the neighborhood and household levels to increase resilience to climate impacts.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Train staff serving unhoused populations in climate preparedness and response skills. To prepare for the annual fire season and other climate-related air quality impacts, provide masks with instructions to County populations unable to remain indoors, in collaboration with community partners. Build on guidance and training from the Bay Area Air Quality Management District as needed.</p>	<p>HCSA</p>	<p>Resilience:</p>  <p>Community</p>	<p>Capital:</p> <p>Current</p>  <p>Personnel:</p>  <p>Existing</p>	 <p>Frontline Community Benefits Health and Safety</p>
<p>b. Proactively establish in-place contracts for climate shock response services, including appropriate vendor prioritization of the County’s needs over other clients and regular tests of performance and response times.</p> <p>i. Establish in-place contracts for emergency extreme weather sheltering for use during climate shocks. Ensure the climate resilience of these facilities.</p>	<p>GSA HCSA SSA</p>	<p>Resilience:</p>  <p>Community</p>	<p>Capital:</p> <p>Current</p>  <p>Personnel:</p> 	 <p>Health and Safety</p>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>c. Expand participation in programs such as the Low-Income Weatherization Program and East Bay Energy Watch that provide funding and resources for low-income households to make homes more resilient.</p>	<p>HCSA SSA</p>	<p>GHG:  <b>Community/Global</b></p> <p>Resilience:  <b>Community</b></p>	<p>Capital: <b>Current</b> </p> <p>Personnel:  <b>Existing</b></p>	 <p><b>Community Prosperity</b> <b>Frontline Community Benefits</b> <b>Health and Safety</b></p>
<p>d. Augment or develop emergency preparedness and response guidance for people with disabilities and older adults. Incorporate guidance into distribution and education efforts in partnership with people living with disabilities and older adult care networks and organizations. Establish channels for emergency alerts.</p>	<p>ACSO-OES GSA-Sustainability HCSA SSA</p>	<p>Resilience:  <b>Community</b></p>	<p>Capital: <b>Current</b> </p> <p>Personnel: </p>	 <p><b>Frontline Community Benefits</b> <b>Health and Safety</b></p>
<p>e. Train staff and equip Alameda County home visiting programs serving low-income and/or disabled children and families with information and resources for climate resilience and protective actions. Work with schools and early care and education organizations. Channel climate health and safety information to children and families. Offer information and resources in the County's threshold and widely spoken languages.</p>	<p>GSA-Sustainability HCSA SSA</p>	<p>Resilience:  <b>Community</b></p>	<p>Capital: <b>Current</b> </p> <p>Personnel:  <b>Existing</b></p>	 <p><b>Frontline Community Benefits</b> <b>Health and Safety</b></p>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>f. Develop warehouse / supply centers as a base of operations to distribute bottled water, protective masks, emergency kits, and other necessary climate shock supplies to housed and unhoused residents (regardless of immigration status), community partners, County-run facilities, and responders. Develop distribution pathways for immediate dissemination of warehouse supplies.</p>	<p><b>ACSO-OES</b> GSA HCSA</p>	<p>Resilience:  <b>Community</b></p>	<p>Capital: <b>Current</b>  +   </p> <p>Personnel:    </p>	<p>  <b>Frontline Community Benefits</b> <b>Health and Safety</b></p>
<p>g. Incorporate climate resilience and response considerations into planning for unhoused communities, including the Office of Homeless Care and Coordination Implementation Plan.</p>	<p>HCSA GSA-Sustainability</p>	<p>Resilience:  <b>Community</b></p>	<p>Capital: <b>Current</b>  +   </p> <p>Personnel:     <b>Existing</b></p>	<p>  <b>Frontline Community Benefits</b> <b>Health and Safety</b></p>
<p>h. Reorganize health emergency supply resourcing for efficient and lasting use. Consider shelf life and community needs when selecting supplies, shifting away from products that expire. Codify processes for regular inventory assessment.</p>	<p><b>HCSA</b></p>	<p>Resilience:  <b>Community</b></p>	<p>Capital: <b>Current</b>  +   </p> <p>Personnel:     <b>Existing</b></p>	<p> <b>Health and Safety</b></p>

## Background and Description

Augmented information and resources will be needed to support the diverse communities we serve during climate disasters. This measure outlines actions to be taken to support specific populations, such as unhoused residents, people with disabilities, older adults, and low-income children and families, with programs, resilience supplies such as N95 masks for smoke, and training for staff, as appropriate. These actions will supplement existing support programs for such targeted populations, to best build on existing staffing, relationships, and resources. These measures build on projects undertaken between 2018 and 2020 to develop clear, actionable guidance for County staff and members of the public on protective actions for wildfire smoke, power shutoffs, and heat waves. They also lay out parameters for management of supplies, such as inventories, which build on the experience of our agencies in supplying personal protective equipment (PPE) to staff and the community during the COVID-19 pandemic. While funding for such supplies remains limited, thoughtful management of resources and planning for prioritizing most-affected populations will ensure the best use of what is available.

## Vision 2026 Alignment

This measure aligns with the Healthcare for All and Eliminate Poverty and Hunger 10X goals by providing climate-conscious support and resources to populations whose health and well-being are most vulnerable to climate change.

## Equity Description

Given that climate events like extreme heat days and poor air quality days will be felt most acutely by those with limited ability to adapt, this measure will provide support and resources for those populations, which include unhoused communities, people unable to remain indoors, low-income communities, older adults, and people with disabilities.

Application of the equity tool led to augmenting the submeasure on people with disabilities' and older adults' emergency response to include establishing channels for emergency alerts.

## Community Engagement

The targeted community engagement efforts, public survey, and the first community workshop revealed that residents lack the supplies and resources they need to protect themselves during climate impacts and disasters. A participant in the public survey shared, "Impoverished folks in Alameda County are disproportionately vulnerable to climate impacts; they are more likely to live in low-lying housing, less likely to have access to air conditioning, less likely to have flexibility from their employers to deal with climate impacts, and less likely to have adequate health coverage to deal with climate impacts. Supporting these populations will help ensure the very worst human impacts of climate change are avoided." We heard that residents do not have masks and air filters and struggle to breathe during wildfires. Therefore, we included submeasures focused on providing masks and expanding participation in programs to make low-income

households more resilient through renovations, such as home weatherization services that may protect indoor air quality by limiting air flow in and out. These households are less likely to be able to afford renovations for resilience, and training staff and programs that serve low-income families can provide resources they lack. Participants in the online feedback forum noted the need for emergency kits for low-income residents, so we included this provision in a submeasure. Forum participants pointed out the vulnerability of youth in addition to older adults to climate change, so we included providing specialized guidance for both young and older populations. Another climate-vulnerable population we heard about, particularly from the targeted community engagement efforts, was the unhoused population and their need for supplies and shelter during extreme weather events. We added two submeasures to develop supply distribution centers and incorporate climate considerations into planning for unhoused communities.



## Metrics and Outcomes

This measure will be assessed based on whether submeasures are accomplished. Metrics such as number of masks provided annually will be considered by implementing agencies.

## CR 5: Place-Based Resilience

Support the creation of resilience hubs and other place-based resilience resources—including both County-run resources such as cleaner air centers and community-run resources—in equitably chosen and easily accessible locations to provide community members with essential services before, during, and after climate shocks. Work with community members to identify needs and existing assets to invest in.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Support the existing cleaner air, power outage, and cooling center network by increasing guidance and making low-tech information sources available and seeking/making available additional resilience resources, such as improved ventilation, access to mapping of communities most affected, and transportation support to centers.</p>	<p><b>ACSO-OES</b> HCSA SSA</p> <p>For County facilities: <b>GSA</b></p>	<p>Resilience:</p>  <p>Community</p>	<p>Capital:</p> <p>Current   +   </p> <p>Personnel:</p>     <p>Existing</p>	 <p>Frontline Community Benefits Health and Safety</p>
<p>b. Conduct a pilot of neighborhood needs and asset mapping including safe gathering points, such as cleaner air, power outage, and cooling centers; public charging stations; resilience and community centers; libraries; and potential temporary shelters.</p>	<p>Convenor: GSA-Sustainability</p> <p>Map Author/ Community Liaison: Library</p> <p>Data providers: ACSO-OES ITD HCSA SSA</p>	<p>Resilience:</p>  <p>Community</p>	<p>Capital:</p> <p>Current   +   </p> <p>Personnel:</p>     <p>Existing</p>	 <p>Frontline Community Benefits Health and Safety</p>



numerous new approaches to meet the growing need for safe places to be during climate emergencies, such as developing recommended air quality thresholds for opening cleaner air shelters, piloting mapping capabilities on the inclement weather center list, and distributing air purifiers to community sites.

This measure builds upon these existing efforts to better protect the County from more frequent and intense climate impacts, particularly the populations most vulnerable to extreme heat, extreme cold, and smoky air. Expanding resilience hubs and other place-based resources will protect people's health and keep them informed about ways to stay safe.

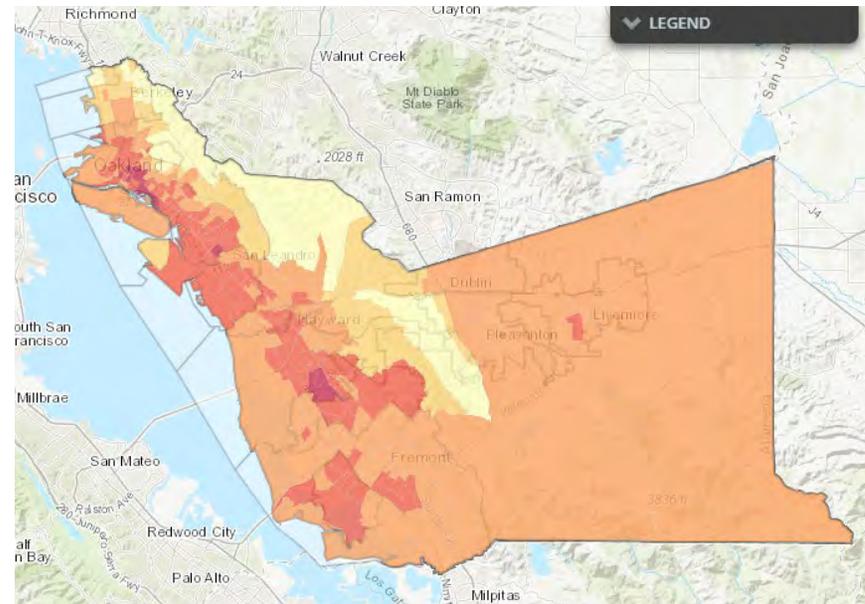
### Vision 2026 Alignment

This measure aligns closely with the Healthcare for All 10X goal by providing place-based health services for frontline populations and advancing health response effectiveness during climate emergencies. Additionally, this measure aligns with the Crime Free County 10X goal by optimizing use of the County's emergency mass notification system.

### Equity Description

While this measure aims to provide all residents with more resources in climate emergencies, it focuses on ensuring frontline communities of color have adequate access to place-based resilience resources. Due to histories of redlining, economic disinvestment, and systemic racism, frontline communities often have little to no access to resources like air conditioning, home air filtration, and tree cover, which can help mitigate the ways that climate change harms Alameda County. An equitable approach will prioritize providing adequate and accessible services to frontline communities, regardless of immigration status.

In applying the equity tool, the need to communicate about resilience hubs and inclement weather sites open to the public using low-tech mechanisms and platforms was identified and incorporated into the measure. The need to select sites easily accessible to the community was also emphasized.



## Community Engagement

Feedback from the public survey and targeted community engagement efforts showed that many in our county are concerned about smoky air, wildfires, heat waves, and extreme temperatures. The public survey, targeted community engagement efforts, and first community workshop showed support for more resilience hubs, which is reflected in the measure language. A participant in the public survey said, “I am part of a Resilience Hubs initiative, and I’d like to see these local resilience hubs be a big part of the climate action plan. These localized hubs build food/water/energy security and collaboration from the ground up, with full participation and leadership by community members. Finally, let us be good ancestors and create a vision that has a meaningful chance of leaving a legacy of a healed humanity and a healed land.” We also heard from the targeted community engagement efforts and the first community workshop that people found it difficult to know where to seek safe shelter during climate events like wildfires, flooding evacuations, or heat waves. This supported sharing location-specific information on climate risks and services year-round through the County’s communication channels.

## Metrics and Outcomes

This measure will be assessed based on whether submeasures are accomplished. Metrics such as an annual count of resilience and inclement weather centers will be considered by implementing agencies.



## CR 6: Mental Health and Resilience

**Create culturally and linguistically appropriate programs to support the community’s mental health needs and personal resilience by engaging community stakeholders, service providers, peers, and family/caregivers.**

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Strengthen and enhance mental health education and support in relation to climate-related disasters.</p>	<p><b>HCSA</b></p>	<p>Resilience:</p>  <p>Community</p>	<p>Capital:</p> <p>Current</p>  <p>Personnel:</p>  <p>Existing</p>	 <p>Health and Safety</p>
<p>b. Expand community-based crisis response teams used for mental health 9-1-1 calls.</p>	<p><b>HCSA</b></p>	<p>Resilience:</p>  <p>Community</p>	<p>Capital:</p> <p>Current</p>  <p>Personnel:</p>  <p>Existing</p>	 <p>Health and Safety</p>
<p>c. Invest in community mental health programs for communities experiencing high rates of isolation and trauma following climate-related disasters, displacements, and other pivotal events, including housing, shelter, and hotel assistance (e.g., “operation comfort” and “project room key”); crisis respite centers, including those that provide peer support; and mobile crisis units.</p>	<p><b>HCSA</b></p>	<p>Resilience:</p>  <p>Community</p>	<p>Capital:</p> <p>Current</p>  <p>Personnel:</p>  <p>Existing</p>	 <p>Health and Safety</p>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>d. Seek funding to support mental health providers and outpatient facilities that serve mental health partners, youth, and those experiencing behavioral health challenges in order to update infrastructure at their physical locations to ensure climate resilience.</p>	<p>ACSO HCSA Probation</p>	<p>Resilience:  Community</p>	<p>Capital: Current  +   </p> <p>Personnel:    </p> <p>Existing</p>	<p> Health and Safety</p>
<p>e. Foster a network of social supports (e.g., friends, colleagues, family members, and community members) that cultivate active coping and self-regulation skills to enhance psychological well-being.</p>	<p><b>HCSA</b></p>	<p>Resilience:  Community</p>	<p>Capital: Current  +   </p> <p>Personnel:    </p> <p>Existing</p>	<p> Health and Safety</p>
<p>f. Develop a disaster behavioral health network to enhance planning and coordination among County system providers, community partners, and other counties to ensure the basic needs of mental health clients, such as medication, housing, food, transportation, and others, are met during a natural disaster.</p>	<p><b>HCSA</b> ACSO-OES Fire GSA SSA</p>	<p>Resilience:  Community</p>	<p>Capital: Current  +   </p> <p>Personnel:    </p> <p>Existing</p>	<p> Health and Safety</p>
<p>g. Develop a resource tool kit that provides age-friendly, culturally, and linguistically appropriate counsel to support mental health clients and family and/or caregivers during and after a natural disaster.</p>	<p><b>HCSA</b></p>	<p>Resilience:  Community</p>	<p>Capital: Current  +   </p> <p>Personnel:    </p> <p>Existing</p>	<p> Health and Safety</p>

## Background and Description

The mental health impacts of climate change and climate-related disasters can include trauma and shock, emotional responses to physical health impacts, and a sense of dread or doom that can exacerbate depression, as well as community-wide impacts, such as strains on social relationships and reduced social cohesion,<sup>2</sup> including due to climate-related displacement. In light of the recent COVID-19 pandemic, contracted providers for Alameda County Behavioral Health have shifted their focus to adopting and implementing practices that address economic disparities and social isolation. This has been done through enhanced telehealth services and alternative means to distributing everyday basic needs, such as food and clothing.



## Vision 2026 Alignment

This measure aligns with the Healthcare for All 10X goal by expanding access to behavioral health services to meet the need created by climate disasters.

## Equity Description

Mental health challenges can resurface or worsen due to climate impacts on health, community cohesion, homes, livelihoods, comfort, and impressions of the future. These may exacerbate the challenges and trauma experienced by racialized and marginalized communities. Therefore, this measure aims to improve governmental and community capacity to increase resilience and improve mental health for those who need it most. This measure also includes a submeasure to develop a tool kit to support culturally and linguistically marginalized people.

Application of the equity tool led to the inclusion of housing, shelter, and hotel assistance for communities displaced by climate-related disasters and culturally and linguistically appropriate support.

## Community Engagement

Participants in the targeted community engagement efforts voiced the need for more mental health services for housed and unhoused

<sup>2</sup> Meighen Speiser, "Mental Health and Our Changing Climate," ecoAmerica, November 3, 2021, <https://ecoamerica.org/mental-health-and-our-changing-climate>.

residents. This measure expands the types of mental health services available to the public and improves the resiliency of mental health services and facilities to help ensure that the public can continue to receive care during climate disruptions.

### Metrics and Outcomes

This measure will be assessed based on whether submeasures are accomplished. The application of a results-based accountability model to submeasures may be considered for assessment.

## External Coordination

### CR 7: Regional Resilience

**Lead within and coordinate with organizations and coalitions and partner with neighboring jurisdictions to access and help build best practices, models, data, and collaboration opportunities for climate action to inform and amplify the County’s work and avoid duplication of effort.**

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Coordinate with the Bay Area Climate Adaptation Network (BayCAN), community-based organizations, and regional coalitions on best practices for anticipated climate impact scenarios and assumptions for planning and infrastructure. Include scenarios with multiple climate/health events occurring at once (such as wildfire smoke, extreme heat, a public safety power shutoff, an oil spill, a tsunami, or a pandemic). Advance and participate in sharing on equity topics and explore options for community advisors.</p>	<p><b>GSA-Sustainability</b></p>	<p>Resilience:</p>  <p><b>Community</b></p>	<p>Capital:</p> <p>Current Existing</p>  <p>Personnel:</p>  <p><b>Existing</b></p>	 <p><b>Health and Safety</b></p>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>b. Collaborate with other fire departments, the Governor’s Office of Emergency Services, and CalFire to proactively and equitably prepare for increased fire risk and mutually build capacity.</p>	<p><b>Fire</b></p>	<p>Resilience:</p>  <p><b>Community</b></p>	<p>Capital:</p> <p><b>Current</b></p>  +  <p>Personnel:</p>     <p><b>Existing</b></p>	 <p><b>Health and Safety</b></p>
<p>c. Participate in the Bay Area Flood Protection Agencies Association; where practicable, invite community members to contribute to decision-making.</p>	<p><b>PWA-Flood Control</b></p>	<p>Resilience:</p>  <p><b>Community</b></p>	<p>Capital:</p> <p><b>Current</b></p>  +  <p>Personnel:</p>     <p><b>Existing</b></p>	 <p><b>Health and Safety</b></p>
<p>d. Coordinate with the Association of Bay Area Health Officials (ABAHO) and other relevant Bay Area regional health equity efforts for equitable community recovery and resilience planning as it relates to public health impacts and mandates.</p>	<p><b>HCSA</b></p>	<p>Resilience:</p>  <p><b>Community</b></p>	<p>Capital:</p> <p><b>Current</b></p>  +  <p>Personnel:</p>     <p><b>Existing</b></p>	 <p><b>Frontline Community Benefits</b> <b>Health and Safety</b></p>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>e. Provide local representation and support to Sector Coordinating Councils, the Regional Consortium Coordinating Council, and various Governmental Coordinating Councils, as applicable, to contribute to regional disaster preparedness and connectivity and secure mutual support for Alameda County in emergencies.</p>	<p><b>ACSO-OES</b></p>	<p>Resilience:</p>  <p><b>Community</b></p>	<p>Capital:</p> <p><b>Current</b></p>  +  <p>Personnel:</p>     <p><b>Existing</b></p>	 <p><b>Health and Safety</b></p>
<p>f. Facilitate coordination between regional partners in 16 critical infrastructure sectors (e.g., emergency services, dams, and utilities) to develop preparedness strategies and provide preparedness opportunities to relevant users.</p>	<p><b>ACSO-OES</b></p>	<p>Resilience:</p>  <p><b>Community</b></p>	<p>Capital:</p> <p><b>Current</b></p>  +  <p>Personnel:</p>    	 <p><b>Health and Safety</b></p>

### Background and Description

Due to their early work on climate resilience rooted in addressing sea level rise in and near the San Francisco Bay, the Bay Area’s counties, cities, and other jurisdictions are keenly aware of the importance of regional coordination around climate resilience. No jurisdiction can tackle the threats we face alone. The region’s jurisdictions can dramatically reduce the scope of the challenge by sharing resources, approaches, and best practices with one another. Regional networks and organizations allow local governments to confront threats in a coordinated fashion. Alameda County has been at the forefront of such efforts around climate resilience by helping to establish the San Francisco Bay Regional Coastal Hazards Adaptation Resiliency Group (CHARG), serving in leadership of the Bay Area Climate Adaptation Network (BayCAN), and regularly sharing our work through numerous disaster response, preparedness, and climate resilience networks. This measure seeks to commit Alameda County to continuing fruitful regional partnerships and network memberships, from which it can draw useful and replicable models for the work ahead.

At the writing of this plan, state, federal, and philanthropic funding sources have begun promising significant investment in climate action in the coming years. Coordinating with nearby jurisdictions may help the County find partners to successfully apply for these funds.

## Vision 2026 Alignment

This measure aligns with the Healthcare for All, Crime Free County, and Accessible Infrastructure 10X goals by promoting health and safety through resilience, improving emergency management, and increasing infrastructure resilience.

## Equity Description

Parts of this measure seek opportunities to expand equity in regional climate resilience efforts by sharing on equity topics, exploring options for community advisors, coordinating with community-based organizations, and potentially inviting community members to contribute to decision-making. These components were all included upon application of the equity tool.

## Community Engagement

Participants in the targeted community engagement efforts mentioned that social distancing in cooling centers during extreme heat days was very difficult during the pandemic. Therefore, we included a submeasure to coordinate with other entities on best practices for facing multiple disaster scenarios simultaneously. Respondents to the public survey also said they would like coordination on sea level rise and other climate-related hazards with other Bay Area entities. One shared, “I’d love to see cross-institution collaboration on preparing for climate risks, backed by county resources when possible. Every resident, worker, or institution making their own plans is exhausting.” This supports the County’s participation in regional coordination efforts.

## Metrics and Outcomes

This measure will be assessed based on whether submeasures are accomplished. Reporting of numbers of networks the County participated in or County-forged partnerships for successful grant funding can be considered.



*Through the County’s membership in groups like the Bay Area Climate Adaptation Network, staff collaborate with and learn from colleagues from a range of jurisdictions and organizations in the region.*

## CR 8: Equitable Community Engagement

Work closely with community organizations and members of the public to advance community resilience.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Facilitate climate capacity building for trusted community organizations.</p> <ul style="list-style-type: none"> <li>i. Co-create culturally appropriate climate impact communications and equip organizations to provide these communications to those they serve.</li> <li>ii. Support organizations to invest in their own resilience to climate shocks and operational sustainability, such as providing training and connections to cost-saving programs.</li> <li>iii. Pilot resources and approaches in community-facing County programs.</li> <li>iv. Streamline a mechanism to compensate and/or reimburse community-based organizations that provide community information dissemination services.</li> </ul>	<p>ACSO-OES Fire GSA-Sustainability HCSA Library SSA</p> <p>Advisor: SSA</p>	<p>Resilience:</p>  <p>Community</p>	<p>Capital:</p> <p>Current</p>  <p>Personnel:</p>  <p>Existing</p>	 <p>Frontline Community Benefits</p>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>b. Support, equip, and compensate leadership of community members to co-develop the County’s climate resilience outreach and projects. Build in accountability.</p> <p>i. Create avenues for young people in Alameda County to collaborate and co-create climate policy with County leadership. Explore creation of and funding for youth and neighborhood ambassador programs for climate resilience.</p> <p>ii. Explore establishing a mechanism to compensate and reimburse individual community members or clients who conduct work to support the County’s resilience efforts.</p> <p>iii. Identify shared decision-making structures.</p> <p>iv. Explore creation of and funding for a climate resilience, climate justice, and racial equity leadership program that may lead to employment and/or civic leadership opportunities (e.g., board/commission/taskforce).</p> <p>v. Explore creation of and funding for programs that provide financial assistance, e.g., stipends, to communities that have experienced historic inequities or live in high-risk/highly affected areas.</p>	<p>Fire GSA-Sustainability HCSA SSA</p> <p>Youth Programs: HCSA Library SSA</p> <p>Advisor: SSA</p>	<p>Resilience:</p>  <p><b>Community</b></p>	<p>Capital:</p> <p>Current</p>  <p>Personnel:</p>  <p><b>Existing</b></p>	 <p><b>Community Prosperity</b> <b>Frontline Community Benefits</b></p>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
c. Identify and address specific barriers to participation in community engagement on climate among marginalized communities, including through existing and/or future participation studies.	<b>GSA-Sustainability</b>	Resilience:  Community	Capital: Current  +    Personnel:     Existing	 <b>Frontline Community Benefits</b>

### Background and Description

Community resilience must be rooted in the needs and experiences of the county community. To be responsive to the residents served by the County, their voices must guide priorities, projects, and actions. The County has prioritized community engagement—including targeted focus groups, community ambassadors, and more—to guide the work of early community resilience projects and could build on this strong foundation for the work under this plan. The work of community engagement to inform climate resilience has become a best practice, and approaches are rapidly developing as climate planning staff across the country and the world develop new models. Efforts to engage the community can have very different impacts and outcomes depending on the modes of engagement, the degree of community ownership over the process, and the extent to which community ideas drive results. The County turns to the Urban Sustainability Directors Network, the Government Alliance on Race and Equity, and other key national and local partners to learn strategies for this important work. This measure lays out mechanisms to engage members of the public as well as trusted community-based organizations whom the County must include in the decision-making process.

### Vision 2026 Alignment

This measure aligns with the Eliminate Poverty and Hunger 10X goal, as it aims to increase the resilience of communities that will be most affected by climate change by conducting outreach to and partnering with these communities to advance resilience.

### Equity Description

The communities and people most affected by climate change should be engaged as experts to inform climate resilience planning. Efforts that build on a nuanced understanding of the context and experiences of most-affected community members will be the most successful. However, these communities have also been the most ignored and marginalized historically. Therefore, this measure aims to increase

communities' capacity to respond to and plan for climate change and to increase the ongoing engagement of marginalized communities in the County's climate resilience planning and actions. With input directly from frontline communities, County programs will more effectively and efficiently meet their needs and fulfill our mission.

Application of the equity tool led to the inclusion of fund exploration for the creation of leadership programs providing compensation and financial assistance to affected communities.

## Community Engagement

Respondents to the public survey indicated the need for community-wide and community-driven preparedness and resilience planning, emphasizing the necessity of this measure. Participants in the first community workshop and the targeted community engagement efforts said that the County needs to collaborate with community-based organizations that work with and provide services for the most marginalized and noted the limited capacity of these organizations. This understanding drives our two submeasures facilitating capacity building for trusted community-based organizations and ensuring support and compensation for community members who put in the labor to co-develop climate resilience outreach and projects. Participants in the first community workshop also noted the need for engaging residents from where they stand, meaning that authentic community engagement tries to engage at times and in environments that will be most convenient and comfortable for that community. Doing so can lead to government actions and policies that best reflect the ideas and priorities of the public. One submeasure commits us to identify and address barriers to participation among marginalized communities, a necessary first step. Participants in the online feedback forum pointed to a specific population—young people—having an important perspective on climate solutions and the necessity of engaging with them and giving them decision-making power. As a result, in addition to exploring the creation of youth and neighborhood ambassador programs for climate resilience, we added more language to make space for other ways the County can engage young people in co-creating climate policy.

## Metrics and Outcomes

This measure will be assessed based on whether submeasures are accomplished. Reporting of the total numbers of members of the public or community organizations engaged can be considered.



*Youth in the REACH Ashland Youth Center Arts & Creativity Program produced a video to promote the County's Cooling Our Communities free tree planting program and help educate neighbors on how to stay safe from heat.*

## Specific Impact Readiness

### CR 9: Reduce Fire Risk

Establish fire fuel reduction and other risk reduction strategies to mitigate increasing risk of fire for community members.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
a. Expand access to wood chipping and other fuel reduction programs for the public and provide information in multiple languages and platforms.	Fire	Resilience:  Community	Capital: Current  +    Personnel:    	 Health and Safety
b. Support the work of external partners to expand the use of grazing to reduce fuel and manage fire risk.	Fire	Resilience:  Community	Capital: Current  +    Personnel:    	 Health and Safety
c. Educate the public and conduct inspections regarding defensible space to aid fire risk reduction, with information in multiple languages and platforms.	Fire	Resilience:  Community	Capital: Current  +    Personnel:     50% Existing	 Health and Safety

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
d. Employ fire management and fuel reduction strategies with climate science best practices.	<b>Fire</b>	Resilience:  Community	Capital: Current  +    Personnel:     50% Existing	 Health and Safety
e. Develop an all-encompassing road mapping network that uses GIS technology to overlay on maps for rural roads.	<b>Fire</b>	Resilience:  Community	Capital: Current  +    Personnel:    	 Flexible Services
f. Consider ways to target the work of fuel mitigation to low-income communities and potential low-income communities within .5 miles of a disadvantaged community as mapped by the California Air Resources Board. Consider job creation opportunities.	<b>Fire</b>	Resilience:  Community	Capital: Current  +    Personnel:    	 Frontline Community Benefits Health and Safety

### Background and Description

Incidents of large wildfires have increased dramatically in California and are projected to continue. According to the California Department of Forestry and Fire Protection (CalFire)<sup>3</sup>, eight of the state’s largest wildfires on record—and 12 of the top 20—occurred in the last six years. Those 12 fires have burned an area the size of Connecticut, about 4 percent of our state. The Alameda County Fire Department is committed to reducing the risk of fire in our community through fuel risk reduction, mapping, planning, public education, and partnerships.

<sup>3</sup> CalFire, “Top 20 Largest California Wildfires,” 2022, <https://www.fire.ca.gov/our-impact/statistics>.

This measure outlines several fire department projects over the period of our plan.

### **Vision 2026 Alignment**

This measure aligns with the Healthcare for All 10X goal by promoting safety standards to mitigate the risk of fires that harm people's health.

### **Equity Description**

Low-income communities, communities of color, and children may have fewer resources to recover or relocate following fire damage to a home or community, and are particularly vulnerable to wildfire smoke. Reducing fire risk reduces possible harm to these communities.

Application of the equity tool led to a commitment to using multiple languages and platforms for programs and considering ways to site efforts in low-income communities.

### **Community Engagement**

Respondents to the public survey indicated that reducing fire risk was, on average, the most valuable priority for the next three to five years. Additionally, over 90 percent of respondents were somewhat concerned or very concerned about the smoky air that results from wildfires. A public commenter on the draft plan noted that the fuel mitigation in CR 9f could serve as an opportunity for job creation, so stakeholders added language pledging to further consider this during implementation.

### **Metrics and Outcomes**

This measure will be assessed based on whether submeasures are accomplished. Reporting of members of the public engaged, served, or educated or fire incidence can be considered.



## CR 10: Flood Control

**Prepare for and adapt to sea level rise and changes in precipitation patterns through assessments and infrastructure investments.**

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Implement infrastructure improvements based on findings from the Flood Control District’s study of the riverine-tidal interface plus the impacts of sea level rise. Prioritize improvements by outfall channel and zone. Explore additional funds as needed.</p>	<p><b>PWA-Flood Control</b></p>	<p>Resilience:</p>  <p>Community</p>	<p>Capital:</p> <p>Current</p>  <p>Personnel:</p> 	 <p>Health and Safety</p>
<p>b. Participate in regional collaborations to encourage alignment in approaches to climate flood-risk impacts, groundwater intrusion, and more. Continue to participate in the Coastal Hazards Adaptation Resiliency Group (CHARG) to advance flood preparedness throughout the region. Share the San Francisco Bay-Delta Community Model with regional partners and work for regional prioritization of the areas that are most vulnerable.</p>	<p><b>PWA-Flood Control</b></p>	<p>Resilience:</p>  <p>Community</p>	<p>Capital:</p> <p>Current</p>  <p>Personnel:</p>  <p>Existing</p>	 <p>Health and Safety</p>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>c. Incorporate sea level rise and increased storm intensity appropriately into flood control infrastructure projects. Consider the most updated, relevant projections in design and construction and allow for potential future modifications, as necessary.</p>	<p><b>PWA-Flood Control</b></p>	<p>Resilience:</p>  <p>Community</p>	<p>Capital:</p> <p>Current</p>  +    <p>Personnel:</p>    	 <p>Health and Safety</p>
<p>d. Increase early flood warning system capacity and pilot it on a major watershed. Coordinate across County agencies for flood evacuation warnings countywide, especially for unhoused populations in flood-risk areas.</p>	<p><b>PWA-Flood Control</b></p>	<p>Resilience:</p>  <p>Community</p>	<p>Capital:</p> <p>Current</p>  +    <p>Existing</p> <p>Personnel:</p>    	 <p>Health and Safety</p>
<p>e. Acquire and install an Advanced Quantitative Precipitation Information (AQPI) radar system. Continuously calibrate the system against rain gauge data to best inform our understanding of future storms and related water management needs.</p>	<p><b>PWA-Flood Control</b></p>	<p>Resilience:</p>  <p>Community</p>	<p>Capital:</p> <p>Current</p>  +    <p>Existing</p> <p>Personnel:</p>    	 <p>Health and Safety</p>
<p>f. Continue to restore urban creeks throughout Alameda County to more natural conditions to enhance the ability of wildlife species to adapt to climate change, consistent with flood protection measures.</p>	<p><b>PWA-Flood Control</b></p>	<p>Resilience:</p>  <p>Community</p>	<p>Capital:</p> <p>Current</p>  +    <p>Personnel:</p>     <p>Existing</p>	 <p>Natural Resources Protection</p>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>g. Continue to repair and restore capacity/structural integrity to storm drains, channels, levees, and pump stations to enable them to perform to their design capacity in handling water flows.</p>	<p><b>PWA-Flood Control</b></p>	<p>Resilience:                        Community</p>	<p>Capital:                      Current   +   </p> <p>Personnel:                           Existing</p>	<p>                      Health and Safety</p>
<p>h. Develop and implement improvement projects to address drainage deficiencies in various open channels and underground flood control drainage facilities.</p>	<p><b>PWA-Flood Control</b></p>	<p>Resilience:                        Community</p>	<p>Capital:                      Current   +   </p> <p>Personnel:     </p>	<p>                      Health and Safety</p>
<p>i. Improve infrastructural flood protection in floodplains identified by the Federal Emergency Management Agency (FEMA), including line and channel improvements and tidegate structure upgrades.</p>	<p><b>PWA-Flood Control</b></p>	<p>Resilience:                        Community</p>	<p>Capital:                      Current   +   </p> <p>Personnel:                           Existing</p>	<p>                      Health and Safety</p>
<p>j. Support access to flood mitigation resources, as appropriate, for businesses, community and faith-based organizations, schools, and residences.</p> <p>i. Offer physical resources (e.g., sandbags).</p> <p>ii. Provide post-event clean-up and opening of public right-of-way.</p>	<p><b>PWA-Flood Control</b></p>	<p>Resilience:                        Community</p>	<p>Capital:                      Current   +   </p> <p>Personnel:     </p>	<p>                      Health and Safety</p>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
k. Hold public meetings to receive feedback on flood control projects from those communities affected by projects, and incorporate community needs into planning as feasible.	<b>PWA-Flood Control</b>	Resilience:  Community	Capital: Current  +    Personnel:    	 <b>Frontline Community Benefits</b>

### Background and Description

Alameda County is projected to experience changes in precipitation patterns and tidal water flows due to sea level rise linked to climate change. It is important to prepare County flood control facilities and infrastructure. Our Flood Control District has been a clear regional leader on adapting to sea level rise by helping to establish CHARG and through early projects with the Adapting to Rising Tides program of the San Francisco Bay Conservation and Development Commission (BCDC). To best protect our residents, environmentally sensitive areas, public open and recreational space, and the local economy, we must prepare our flood control assets and functions for climate changes already underway.

### Vision 2026 Alignment

This measure aligns with the Accessible Infrastructure 10X goal by investing in resilient and adaptable infrastructure.

### Equity Description

Like all climate impacts, sea level rise and flooding disproportionately harm marginalized communities. Many FEMA flood hazard zones are in census tracts comprised predominantly of people of color. Additionally, unhoused people and low-income populations who live in flood-prone areas have few, if any, resources to protect themselves from flooding. People with more resources are likely not BIPOC or low income, are better able to move away from at-risk areas, and are more likely to have protections in place, like flood insurance, to help them financially weather damage caused by flooding and sea level rise.

The application of the equity tool led to adding a submeasure for public meetings to hear from communities most affected by proposed changes or projects.

## Community Engagement

Over 80 percent of respondents to the public survey indicated they were somewhat or very concerned about sea level rise and storm surges, indicating the importance of including a flood control measure in the GOCAP. Participants in the first community workshop asked that the County consider sea level rise for new construction near the coastline. This feedback aligned with our submeasure on incorporating sea level rise into flood control infrastructure projects. We heard from our targeted community engagement efforts about the particular vulnerability of unhoused people living in floodplain and riverbed areas. As a result, we added language and relevant additional internal stakeholders to the submeasure on flood warning capacity and evacuation warnings to consider unhoused populations in flood-risk areas.

## Metrics and Outcomes

This measure will be assessed based on whether submeasures are accomplished.



Before



After

*The Alameda County Flood Control District restored a section of Peralta Creek that was badly eroded. Urban flood control restoration efforts create beautiful natural areas for both residents and wildlife while reducing flood risk.*

# Green Economy and Prosperity

## MEASURES

### Procurement

GEP 1: Vendor Sustainability and Resilience

GEP 2: Contracting With Small Nonprofits

### Workforce

GEP 3: Hiring on Climate-Related Large Capital Projects

GEP 4: Green Job Promotion

GEP 5: Growing the Alameda County Climate Workforce

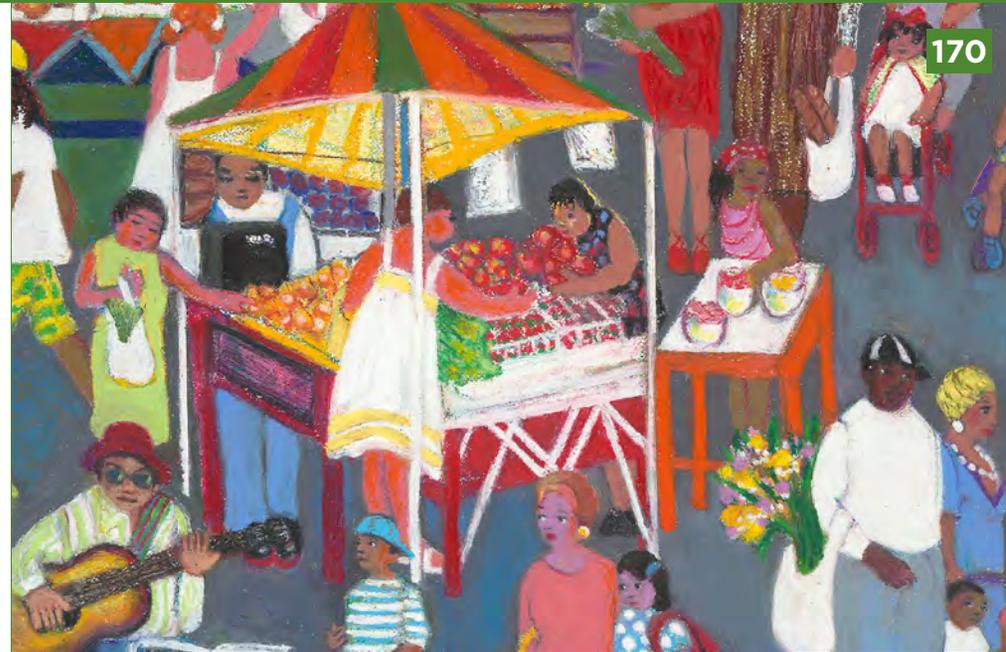
### Materials Management

GEP 6: Developing the Regional Circular Economy

GEP 7: Expanding Edible Food Recovery

GEP 8: Sourcing Healthier, Low-Carbon Food

GEP 9: Integrated Circular Food Economy



This section covers how we will invest in win-win strategies that reduce the County's

environmental footprint while growing the local economy and creating jobs and economic opportunity for residents.

## Section Introduction

### Description

Underlying social and economic factors, such as economic opportunity and access to jobs, can determine a population’s ability to withstand and bounce back from climate change impacts. A thriving economy is also central to the County’s vision for our community—a future our community can “bounce forward” to achieve. In the wake of a pandemic that has harmed our local economy, now more than ever, it is important to keep our community’s economic well-being central in all our efforts, including climate action. Fortunately, numerous actions simultaneously support greenhouse gas reductions, resilience, economic benefits, and job creation. Climate action, which can include hiring new County staff or investing in green buildings or infrastructure, can also benefit our community economically. This section focuses on ensuring investments made through infrastructure, purchasing, and hiring related to plan implementation are equitable and contribute to prosperity and resilience in our community.

The County has three particularly effective levers to support an equitable shift to a carbon-free and resilient economy:

- Procurement of goods and services, totaling more than \$1 billion annually and involving tens of thousands of vendors, with a high priority on small, local, and emerging vendors, and those who provide culturally responsive services.



*Our local green economy takes many forms. Recycled mulch and compost bring new life to pallet scraps and food, sequester carbon, and create jobs in our community.*

- Reuse and repurposing of food and materials purchased by the County and community members to support a local reuse economy.
- County hiring and workforce development practices to provide equitable access to and training in climate-related job opportunities.

The County has laid a firm foundation for this work through our programs and practices, which include:

- Enhanced contracting opportunities for small, local, and emerging businesses through the [SLEB Program](#) and businesses certified through the [Alameda County Green Business Program](#).
- Requirements for contracting and subcontracting with local businesses and other prioritized populations in our construction projects.

- Early career opportunities like internships and fellowships.
- Workforce development efforts through the [Alameda County Workforce Development Board \(ACWDB\)](#) and [Workforce and Benefits Administration \(WBA\)](#).
- Addressing food insecurity and providing job-training opportunities through four urban farm projects as part of the Alameda County Sheriff's Office and the Alameda County Deputy Sheriffs' Activities League (DSAL) and other partners.

The Green Economy and Prosperity measures apply a climate lens to these programs for ways to further encourage economic inclusion and access to opportunity.

## Greenhouse Gas Reductions

According to Alameda County's [Supply Chain Sustainability Report](#), issued in 2015 and updated in 2019, the annual greenhouse gas emissions associated with County purchasing have been four times the amount from County operations. The largest contributor was professional and community services, accounting for more than half of greenhouse gas emissions in 2019 (approximately 90,000 metric tons of CO<sub>2</sub>e). The County does not have direct control over these emissions, but purchasing relationships can help influence vendors' operations, promoting sustainable and resilient systems through highlighting programs and rebates available to



*Economic activity brings resources to our community.*

vendors, developing incentives, and thoughtfully crafting contract requirements. Food that the County purchases also contributes to our emissions footprint from the emissions caused by producing, processing, transporting, and disposing of food. Indeed, half the material dumped in California landfills is organic—including food scraps—and contributes 20 percent of the State's methane emissions.<sup>1</sup> Approaching our food system with a circular economy lens will reduce greenhouse gas emissions at all stages of the process.

Additionally, actions in this section allow us to advance other community priorities, such as job creation, in the spirit of a just transition away from fossil fuels.

<sup>1</sup> "California's Short-Lived Climate Pollutant Reduction Strategy," CalRecycle, accessed November 30, 2022, <https://calrecycle.ca.gov/organics/slcp>.

## Resilience Benefits Overview

The actions outlined in this section will advance resilience in Alameda County in several ways. The procurement-related actions contribute to increased resilience of vendor operations to climate impacts so vendors can continue to operate and provide goods, services, and employment. For example, the East Bay Economic Development Alliance (East Bay EDA) *East Bay Forward* report identified cleantech as an industry with large potential for growth and local, high-quality jobs. A broad view of community well-being, including social determinants of health and of climate resilience, shows us that the economic opportunity sought in this section will help make our community better able to bounce back from climate disasters.

## Equity Overview

Unemployment rates were higher in the East Bay for women and Latino and African American workers during the pandemic, many of whom work disproportionately in the low-wage jobs most affected by COVID-19.<sup>2</sup> Justice-involved residents often face barriers to securing employment. The COVID-19 pandemic hit local small businesses especially hard, particularly those owned by women, people of color, and immigrants.<sup>3</sup> Implementation of GOCAP measures across all six sections, including renewable energy projects, expanded charging infrastructure, repair and refurbishment of County goods,



and litter abatement in County spaces, will require investments. Through the Green Economy and Prosperity action section, the County plans to invest in measures that reduce emissions while providing job training and job creation to ensure the investments benefit the local economy.

## Vision 2026 Alignment

The measures in this section focus on advancing sustainable prosperity for all while reducing greenhouse gas emissions and increasing resilience to climate impacts and align with the Vision 2026 elements of a Prosperous and Vibrant Economy, a Thriving and Resilient Population, and a Healthy Environment. Measures in this section also

<sup>2</sup> “Advancing Workforce Equity in the Bay Area: A Blueprint for Action,” National Equity Atlas, 2021, <https://nationalequityatlas.org/research/workforce-equity-bay-area>.

<sup>3</sup> “East Bay Forward,” East Bay Economic Development Alliance, September 2021, [https://eastbayeda.org/wp-content/uploads/2021/11/EB-Forward-Complete\\_Final.pdf](https://eastbayeda.org/wp-content/uploads/2021/11/EB-Forward-Complete_Final.pdf).

aim to decrease food waste and prepare and connect residents from priority communities to climate-related job opportunities, consistent with the 10X goals Eliminating Poverty and Hunger and Employment for All, respectively.

**Monitoring and Reporting**

The measures in this section will be assessed based on whether submeasures are accomplished. Metrics by submeasure will be considered by implementing agencies.

**Measures**

**Procurement**

**GEP 1: Vendor Sustainability and Resilience**

**Support the resilience and sustainability capacity of current and prospective County vendors and contracted service providers.**

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Seek resources for and build the capacity of local current and prospective vendors, contracted service providers, and subcontractors to conduct their operations and perform their services in a manner aligned with County sustainability goals.</p> <p>i. Integrate outreach, training, and resources in sustainable, climate-smart, equitable, and climate-resilient operations into programs for current and prospective vendors.</p> <p>ii. Target outreach to small, emerging, and disadvantaged local businesses.</p>	<p>GSA-Sustainability (Convenor)</p> <p>ACSO</p> <p>GSA-OAP</p> <p>GSA-Procurement</p> <p>HCSA</p> <p>Probation</p> <p>SSA</p>	<p>GHG:</p>  <p><b>Supply Chain</b></p> <p>Resilience:</p>  <p><b>Community</b></p> <p><b>County Operations</b></p>	<p>Capital:</p> <p>Current</p>  <p>Personnel:</p>  <p><b>50% Existing</b></p>	 <p><b>Community Prosperity</b></p>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>b. Explore a requirement for successful bidders on high-value contracts to provide a streamlined business resilience and climate plan. Develop any needed training, templates, and checklists to assist with contractor and subcontractor plan understanding and development.</p>	<p>ACSO GSA-Sustainability HCSA Probation SSA</p>	<p>GHG:  <b>Supply Chain</b></p> <p>Resilience:  <b>Community County Operations</b></p>	<p>Capital: <b>Current</b> </p> <p>Personnel: </p>	<p> <b>Community Prosperity</b></p>
<p>c. Explore new incentives, requirements, mechanisms, and funding for contracted service providers serving populations disproportionately harmed by climate change to support clients' uptake of appropriate protective actions and health services needed before, during, and after climate shocks.</p>	<p>ACSO GSA-Sustainability HCSA Probation SSA</p>	<p>Resilience:  <b>Community</b></p>	<p>Capital: <b>Current</b> </p> <p>Personnel: </p>	<p> <b>Frontline Community Benefits</b></p>
<p>d. Explore and implement contract mechanisms or other incentives to encourage vendors to advance sustainability in their operations, such as becoming certified by the Alameda County Green Business Program. Encourage businesses to produce sustainable goods locally when possible.</p>	<p>GSA-Sustainability</p>	<p>GHG:  <b>Supply Chain</b></p>	<p>Capital: <b>Current</b>  <b>Existing</b></p> <p>Personnel:  <b>Existing</b></p>	<p> <b>Community Prosperity</b></p>

### Background and Description

Alameda County businesses, including County vendors, are the backbone of our community, providing economic activity, crucial goods and services, and jobs to residents. Though cities and the unincorporated community lead business and economic development efforts, the County has a long history of leveraging our purchasing power to support local businesses, especially small, local, and emerging

businesses (such as through the [SLEB Program](#)). This support of local business can help improve the local environment and reduce climate change as well. For example, when goods and services come from local sources, we reduce some emissions and pollution associated with transportation. And vendor resilience can help ensure the critical goods and services that keep the County running are available, even during climate-linked emergencies. This will help avoid interruptions in County services. Built-in incentives and capacity building for our vendors, small and large, to increase their operational sustainability will allow the County to invest both in economic prosperity and a healthy environment.

The County's [Supply Chain Sustainability Report](#), issued in 2015 and updated in 2019, analyzed purchasing to determine how we could best spend resources providing community services while also enhancing the community's health and well-being. The County's supply chain emissions are significant: they total four times our direct operational emissions. In the 2015 report and its 2019 addendum, professional and community services comprised 79 percent of the 2019 sustainability impacts associated with supply chain expenditures, followed by 11 percent from construction and maintenance paid for by the County. Community services include childcare, community food and housing, and health care provision. Addressing emissions and other environmental impacts from County community services vendors must be done thoughtfully, understanding the financial, logistical, and operational contexts in which vendors operate. Rather than relying solely on new requirements, the actions here offer a broad range of tools to flexibly help and incentivize vendors to reduce harmful pollution and emissions, and build more sustainable and resilient operations to invest in their business, the health of their staff, and the well-being of the local community.

### Vision 2026 Alignment

This measure aligns with the Healthcare for All 10X Goal by promoting practices that support healthy communities and working to prevent environmental contaminants in communities.

### Equity Description

This measure helps local vendors build their operations' resilience. Local vendors are more likely than nonlocal vendors to inject money they receive into the local economy, increasing resilience and prosperity. Supporting the local economy helps support jobs and livelihoods



for working- and middle-class residents. This measure includes a submeasure to support contracted providers who serve populations disproportionately harmed by climate change to help these clients protect themselves. This will help populations most affected by climate change remain resilient in a changing climate.

Application of the equity tool led to explicit targeting of small, emerging, and disadvantaged businesses.

**Community Engagement**

Over half of the respondents to the public survey indicated that helping local County vendors be more sustainable and resilient is very important. This support included interest in education for these businesses and organizations on using green products and their benefits and incentivizing businesses to create and use renewable energy. This measure helps to meet these goals, as it aims to increase the resilience and sustainability of County vendors and contracted service providers.

**Metrics and Outcomes**

This measure will be assessed based on whether submeasures are accomplished. Metrics such as new or augmented training and resources provided to prospective or current vendors, or the number of new Alameda County Green Business Certifications annually, will be considered.

**GEP 2: Contracting With Small Nonprofits**

**Support small community-based organizations (CBOs) to participate in community outreach designed to advance resilience.**

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
a. Explore ways to support nonprofit Alameda County CBOs with budgets of under \$500,000 to secure County contracts. Implement new mechanisms, if feasible.	ACSO GSA-Sustainability HCSA Probation SSA	—	Capital: Current  Personnel: 	 <b>Frontline Community Benefits</b>

## Background and Description

The Office of Sustainability, Health Care Services Agency, Office of Emergency Services, and Fire Department began community engagement efforts in 2019 to make the needs of our community central to climate action planning. The County continued these efforts to support the work of GOCAP development in 2021 and 2022. Throughout, members of the public have emphasized the importance of engaging CBOs in the County's climate resilience work as experts and connectors to community members who benefit from County-funded programs. Official government communication channels that share protective actions for climate-related disasters, such as remaining indoors to avoid hazardous wildfire smoke, may not reach all residents. CBOs can provide a crucial communications link. While responding to the COVID-19 pandemic, County agencies learned the importance of working with CBOs to gain trust and convey messages in culturally appropriate media, formats, and languages. This measure supports the exploration of mechanisms, programs, or other supports to facilitate relationships with community-based nonprofits that can play a critical role in protective actions and other climate change impact-related communications.



## Vision 2026 Alignment

This measure aligns with the Employment for All 10X goal by promoting small-scale entrepreneurship efforts for job creation.

## Equity Description

Smaller, local nonprofits are more likely to understand community needs and demands—especially if they work with marginalized communities—but may have fewer resources to successfully accomplish their work and to solicit new projects. Removing barriers to contracting for the smallest CBOs creates a more equal playing field and can indirectly provide more support and visibility to under-resourced communities.

**Community Engagement**

While we did not receive specific community input on mechanisms for contracting with small organizations, we heard from the focus groups that people cannot afford their basic needs. Supporting the nonprofits providing direct assistance to our population is one way the County can continue to provide needed community services.

**Metrics and Outcomes**

This measure will be assessed based on whether new mechanisms are explored or established to support contract provision by small CBOs.

**Workforce**

**GEP 3: Hiring on Climate-Related Large Capital Projects**

**For large climate-related capital projects at the County, meet or exceed goals in existing workforce agreements to prioritize hire of and outreach to local residents with high barriers to employment.**

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
a. Continue monitoring contractors to prioritize hiring disadvantaged residents on covered projects, with a goal of 40 percent of all apprentice hours worked by disadvantaged residents.	<b>GSA-OAP</b> GSA-BMD GSA-Capital Programs GSA-Real Property PWA	—	Capital: Current  +    Existing Personnel:     Existing	 <b>Community Prosperity</b>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>b. Perform robust outreach to connect disadvantaged residents (i.e., those unemployed at commencement of work and sponsored into or enrolled in an approved apprenticeship program) with organizations providing pre-apprenticeship and pre-employment support. Work with outside organizations on outreach to communities of interest, including those who are formerly incarcerated, former foster youth, those who have experienced homelessness, single parents, and others struggling to find full time employment. Make referrals to training as needed.</p>	<p><b>GSA-OAP</b> GSA-BMD GSA-Capital Programs GSA-Real Property PWA</p>	<p>—</p>	<p>Capital: Current  +    Existing</p> <p>Personnel:     Existing</p>	<p> <b>Community Prosperity</b> <b>Frontline Community Benefits</b></p>
<p>c. Continue to monitor and enforce adherence to the County’s Project Stabilization and Community Benefits Agreement (PS/CBA).</p>	<p><b>GSA-OAP</b> GSA-BMD GSA-Capital Programs GSA-Real Property PWA</p>	<p>—</p>	<p>Capital: Current  +    Existing</p> <p>Personnel:     Existing</p>	<p> <b>Community Prosperity</b></p>

### Background and Description

In 2013, the Alameda County Board of Supervisors approved the Project Stabilization/Community Benefits Agreement (PS/CBA) to ensure labor harmony and expand previous policy objectives to support hiring of Alameda County residents. In October of 2020, the policy was renegotiated and extended for 10 years. This measure aims to support these same hiring objectives to be employed on large County construction projects that advance our carbon reduction goals. It describes the work of PS/CBA implementation for such projects.

Projects the PS/CBA covers differ by agency. For most contracting agencies, including GSA, all capital construction projects approved by the Board of Supervisors are covered for all trades at \$1 million Construction Value (CV) and greater, with the exception of Public Works

Agency (PWA) projects, which are covered for all trades at \$3 million CV and greater and construction trucking at \$1 million CV and greater. For this measure, the projects covered will match that of the PS/CBA. This work is aligned with efforts to consider economic inclusion for infrastructure and decarbonization projects at the state and federal levels.

Actions under the agreement include submitting a Local Hiring Compliance Plan, paying prevailing wages and fringe benefits, and making best efforts to ensure county residents perform a minimum of 40 percent of all hours worked, and disadvantaged residents perform a minimum of 40 percent of all apprentice hours worked on a craft-by-craft basis. Work with outside organizations on outreach to communities of interest will support job access by disadvantaged residents and those who face barriers to employment, including those who are formerly incarcerated, former foster youth, those who have experienced homelessness, single parents, and others struggling to find full time employment.

### Vision 2026 Alignment

This measure aligns with the Vision 2026 elements of a Thriving and Resilient Population and a Vibrant and Prosperous Economy and with the 10X goal Employment for All, by expanding opportunities for those with barriers to employment.

### Equity Description

Unemployment disproportionately affects racialized residents, with black, mixed-race, and Hispanic residents experiencing the highest unemployment rates.<sup>4</sup> This measure seeks to address unemployment and underemployment by ensuring hiring goals for disadvantaged residents are met or exceeded. The measure also includes targeted outreach actions in recognition that disadvantaged residents may have limited access to these programs because of historical injustices rooted in racism that have affected education and training access for employment in technical trades.



<sup>4</sup> "Overview of the United States," *The Demographic Statistical Atlas of the United States - Statistical Atlas*, 2018. <https://statisticalatlas.com>.

## Community Engagement

Eighty-nine percent of respondents to the public survey indicated that they thought it was either important or very important for the GOCAP to prioritize actions that support social equity and vulnerable community members. We also heard from the survey and the first community workshop that people want green job training opportunities, particularly for those from marginalized communities, because these will help people obtain stable jobs. Such jobs help people escape poverty and make more sustainable decisions. This feedback aligns with the aims of the measure’s outreach to connect individuals facing barriers to employment with pre-employment and pre-apprenticeship organizations. We also heard from the first community workshop that accountability for this measure will be important to measure progress and allow for adjustments if necessary. We will achieve this goal through metrics and the monitoring programs.

## Metrics and Outcomes

This measure will be assessed based on whether submeasures are accomplished. Metrics such as percent local and/or disadvantaged residents hired and number reached in outreach efforts will be considered by implementing agencies.

## GEP 4: Green Job Promotion

**Promote pathways and access to climate-related County jobs so that employees in climate roles represent the diversity of communities in the County and all groups benefit from the green economy.**

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
a. Identify climate-related jobs, growth potential, and pathways at the County.	<b>GSA-Sustainability</b>	—	Capital: Current  +     Personnel:    	—

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>b. Share County green career paths with employees.</p>	<p><b>HRS</b></p>	<p>—</p>	<p>Capital: Current  + </p> <p>Personnel:    </p>	<p>—</p>
<p>c. Support agencies to partner with community-based organizations, trade organizations, and community colleges on recruitment to broaden reach for climate and green economy jobs, in a manner informed by priority communities.</p>	<p><b>HRS</b></p>	<p>—</p>	<p>Capital: Current  +   Existing</p> <p>Personnel:    </p>	<p> <b>Frontline Community Benefits</b></p>
<p>d. Give input to trade schools on training needs for sustainable and resilient, high-priority workforce training needs at the County, such as those related to building operations and maintenance.</p>	<p><b>GSA-HR</b> <b>GSA-Operations</b> GSA-BMD GSA-Energy GSA-Logistics</p>	<p>—</p>	<p>Capital: Current  + </p> <p>Personnel:    </p>	<p>  <b>Community Prosperity Flexible Services</b></p>
<p>e. Provide employees with training opportunities on the latest technologies and approaches to maintain County buildings and fleets.</p>	<p>GSA-BMD GSA-Logistics</p>	<p>GHG:  <b>County Operations</b></p>	<p>Capital: Current  +  </p> <p>Personnel:    </p>	<p>  <b>Flexible Services Return on Investment</b></p>

## Background and Description

Implementation of the climate plan will require County staff to expand their capacity to implement and maintain new climate-friendly technologies. Once gained, these skills will be valuable in their careers. To make the advantages of climate-related job training available to all, we hope to provide on-ramps for such training so that climate-related roles will reflect the diversity of county communities. We will approach this by supporting partner organizations to broaden their recruitment efforts and supporting external programs that prepare members of historically under-resourced communities for new economic opportunities. Along the way, we will identify climate-related County jobs. Later, we can evaluate if the existing entry points and pathways provide sufficient opportunities to foster a diverse workforce in these climate-related roles.



## Vision 2026 Alignment

This measure aligns with the Vision 2026 element of a Prosperous and Vibrant Economy because the green economy is becoming a larger portion of the overall economy and provides high-quality, living wage jobs. This measure aligns with the 10X goal Employment for All because it supports both meaningful employment broadly and responsive training for County employees specifically.

## Equity Description

Stakeholders recognized that to broaden recruitment to people in historically under-resourced communities or communities of color, we need to hear from those communities about how best to reach them. The phrase “in a manner informed by priority communities” was added to the submeasure about partnering with local organizations to stress that the project team will engage with priority communities to better understand how they prefer to be reached.

## Community Engagement

Eighty-nine percent of respondents to the public survey question about how important it is for the GOCAP to prioritize equity said it was very important or somewhat important to prioritize actions that support social equity and vulnerable community members. Sixty percent of respondents to a question about co-benefits of climate action said that improving the economy and creating jobs is a very important co-benefit of climate action, and an additional 32 percent said it was somewhat important.

Focus group and listening session participants emphasized that the GOCAP should prioritize equity and that currently many residents cannot afford their basic needs. The input aligns with this measure’s goal to ensure that everyone can access opportunities from the transition to a green economy and workforce.

We heard from the public survey and the first community workshop that the public would like to see more green job training opportunities. One public survey respondent stated, “I would like to see a Climate Corps and Green Job Corps type program open to all ages, providing training and benefit to the community.” Workshop participants envisioned that 10 years from now, our region would widely support green job development and opportunities for marginalized communities. One participant suggested a partnership with trade schools and high schools; high schools are not currently included but can be considered for future initiatives. This feedback supports the submeasures addressing training and work-based learning opportunities for sustainable workforce needs.

**Metrics and Outcomes**

This measure will be evaluated based on the accomplishment of submeasures or similar initiatives.

**GEP 5: Growing the Alameda County Climate Workforce**

**Expand County partnerships with local workforce development programs, including educational partners and employers, to support a diverse, trained, and ready workforce for climate-related career opportunities and serve as a resource for industry partners seeking to build pathways into the clean economy. Include these opportunities in County departments that administer workforce development programs.**

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
a. Identify key local stakeholders and develop robust partnerships to support climate-related workforce development efforts.	SSA GSA-OAP	Resilience:  Community	Capital: Current  +    Personnel:    	 Community Prosperity Frontline Community Benefits

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>b. Encourage service providers to prioritize high-growth, climate-related employment opportunities that provide career pathways to good, family-sustaining/quality careers for diverse communities (including people of color, women, people with disabilities, youth, low-wage earners), and people with barriers to employment.</p>	<p><b>SSA</b> GSA-OAP</p>	<p>Resilience:  <b>Community</b></p>	<p>Capital: <b>Current</b>  + </p> <p>Personnel:    </p>	<p> <b>Community Prosperity</b> <b>Frontline Community Benefits</b></p>
<p>c. Educate and facilitate service provider connections with training entities that enable exposure to climate-related instruction or on-the-job training, as informed by local labor market information.</p>	<p><b>SSA</b></p>	<p>Resilience:  <b>Community</b></p>	<p>Capital: <b>Current</b>  +  </p> <p>Personnel:    </p>	<p> <b>Community Prosperity</b> <b>Frontline Community Benefits</b></p>
<p>d. Increase focus on County departments that administer workforce programs to engage in matching Alameda County residents from diverse and low-income communities, as well as youth and people historically affected by systemic barriers and/or facing individual barriers to employment, with high-quality green employment opportunities, as available.</p>	<p><b>SSA</b></p>	<p>Resilience:  <b>Community</b></p>	<p>Capital: <b>Current</b>  +  </p> <p><b>Existing</b></p> <p>Personnel:    </p>	<p> <b>Community Prosperity</b> <b>Frontline Community Benefits</b></p>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
e. Prioritize the recruitment of County residents from BIPOC and low-income communities as workers on County construction projects covered by the Countywide Project Stabilization/Community Benefits Agreement.	<b>GSA-OAP</b>	Resilience:  <b>Community</b>	Capital: Current  +    Existing Personnel:    	 <b>Community Prosperity</b> <b>Frontline Community Benefits</b>

## Background and Description

This measure focuses on growing a trained and diverse workforce in Alameda County ready for climate-related roles, including those likely to result from this plan’s implementation, through increased partnerships and support of service providers. Market analyses will ensure that efforts are rightsized to the existing and projected employer demand for these roles. (Based on the East Bay EDA’s [East Bay Forward 2021 report](#), we anticipate large potential for growth and high-quality jobs in the cleantech industry, for example.) This effort will also support efforts to prepare a workforce that can help meet the hiring goals on large climate-related capital projects in GEP 3 and County positions in GEP 4.

The ACWDB and WBA in the Social Services Agency (SSA) will lead implementation, building upon their experience and expertise in providing tools, resources, and services to job seekers and employers related to job placement, training and job readiness, and support services (e.g., transportation, childcare assistance, etc.). These services address potential barriers to participation and provide educational opportunities in partnership with other organizations that are tailored (through case management) to their respective clients. For example, the WBA supports the Public Service Training Program, which provides paid training positions at SSA for specific roles, as part of the CalWORKS program. The ACWDB and Alameda County are partners in a local project led by Rising Sun Center for Opportunity through the California Workforce Development Board’s High Road Training Partnerships initiative, which focuses on “industry partnerships to drive equity, sustainability, and job quality in the residential decarbonization industry.”<sup>5</sup> The project helps prepare the “emerging building decarbonization industry and workforce to meet demand in the SF Bay Area region prioritizing equity, job quality, and job access for local residents.”<sup>6</sup> Rising Sun is also a partner in implementing the County’s Project Stabilization/Community Benefits Agreement by referring County resident graduates of its pre-apprenticeship training programs to work on County construction projects.

<sup>5</sup> “High Road Training Partnerships,” California Workforce Development Board, accessed November 29, 2022, <https://cwdb.ca.gov/initiatives/high-road-training-partnerships>.

<sup>6</sup> “High Road to Building Decarbonization in the San Francisco Bay Area,” California Workforce Development Board, accessed November 29, 2022, [https://cwdb.ca.gov/wp-content/uploads/sites/43/2021/04/2021.HRTP\\_RisingSun\\_ACCESSIBLE.pdf](https://cwdb.ca.gov/wp-content/uploads/sites/43/2021/04/2021.HRTP_RisingSun_ACCESSIBLE.pdf).

## Vision 2026 Alignment

This measure aligns with the Vision 2026 element Thriving and Resilient Population and the 10X goals of Employment for All and Eliminate Poverty and Hunger as it aims to build career prospects and fulfill the growing need for skilled labor in climate work through connecting individuals (particularly those from diverse communities and those with barriers to employment) to well-paid, climate-related career opportunities.

## Equity Description

This measure aims to support efforts to prepare people from diverse communities—people of color, women, people with disabilities, youth, low-wage earners—and people with high barriers to employment for family-supporting and quality climate-related careers and to make available to them job opportunities in this field, thereby increasing their access to economic opportunity. Before the equity tool was applied to evaluate this measure, it included a focus on diverse and low-income communities as listed previously (minus people with disabilities), as well as people with barriers to employment. Application of the tool highlighted the omission of people with disabilities as members of diverse communities. It also illuminated that barriers to employment are not just specific to an individual but can be systemic. We therefore updated the measure language to read “diverse communities (including people of color, women, people with disabilities...” and “engage in matching Alameda County residents from diverse and low-income communities, as well as youth and people historically affected by systemic barriers and/or facing individual barriers to employment.”

## Community Engagement

This measure reflects the input we received throughout the community-engagement process. Participants in the public survey and other targeted community engagement efforts expressed strong support for prioritizing actions that support equity and vulnerable communities. They also highlighted the connection between the ability to meet basic needs and people feeling empowered to help address climate action. In the public survey, 61 percent of respondents felt “improving the economy and creating jobs” was a “very important” co-benefit of climate action. When asked about their vision for Alameda County 10 years from now, participants in the workshop shared having “a leadership model for green job development (equitably distributed)” and “prioritizing job training/opportunities for marginalized



*Dig Deep Farms creates local jobs and offers reentry internships for people coming out of periods of incarceration.*

community.” They were also supportive of increased County partnerships with green job training opportunities and recommended including local schools or reentry programs to address vulnerable populations, such as high schools and trade schools, in these training opportunities.

**Metrics and Outcomes**

The intended outcome of this measure is to expand local workforce development programs to build greater opportunities for a wide array of individuals and backgrounds, particularly to meet the growing demand for climate-related work and careers. This measure will be assessed based on whether submeasures are accomplished.

**Materials Management**

**GEP 6: Developing the Regional Circular Economy**

**Support a circular economy based on reuse, repair, recovery, and refurbishment.**

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
a. Participate in a regional collaborative focused on community reuse and repair programs to increase waste diversion, reduce material consumption, and create green jobs.	<b>GSA-Sustainability</b>	GHG:  <b>Supply Chain</b>  Resilience:  <b>Community County Operations</b>	Capital: Current  +   Personnel: 	 <b>Community Prosperity</b>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
b. Operate a pilot program through the County Library system for distribution of tools that support the growth of the sharing economy in the community and expand the County's seed lending library to support home gardens.	<b>Library</b>	GHG:  <b>Supply Chain</b>  Resilience:  <b>Community</b>	Capital: <b>Current</b>  +     Personnel:     <b>Existing</b>	 <b>Frontline Community Benefits</b>

## Background and Description

The County conducted two studies to analyze the estimated greenhouse gas emissions, particulate pollution (PM<sub>2.5</sub>), and human health impacts that result from our demand for goods and services. Our most recent study of 2019 expenditures discovered emissions from County purchasing (e.g., buying furniture, equipment, and food for congregate settings) are four times greater than emissions associated with County operations (e.g., business-related travel and facility energy use).<sup>7</sup> While we have much less influence over supply chain emissions than operational emissions, we identified several actions in the GOCAP to target emissions from the supply chain and other upstream avenues.

This measure looks to support developing a circular economy on a regional level to make upstream solutions more accessible, affordable, and practical. It complements County-specific upstream initiatives addressed in the Sustainable Materials Management section of the GOCAP. Currently, the County offers a limited number of surplus County goods to the public through public auction and contracts with nonprofits and schools to donate or provide heavily discounted County goods. GEP 6 looks to expand upstream solutions and the sharing economy by increasing reuse and repair opportunities in the community through a tool-lending pilot program. At a regional level, Alameda County is an observing partner in San Francisco's grant-funded project to establish a robust online materials exchange platform to divert both building materials and durable goods from landfills through reuse.<sup>8</sup> While Alameda County is not actively participating in the pilot program, we will provide feedback for the program's design with the goal of joining a permanent reuse collaborative once one is established. In doing so, the County will further pave the way for the growing circular economy through our external-facing County operations.

<sup>7</sup> Alameda County GSA Office of Sustainability, "Analysis of Sustainability Impacts of Alameda County Supply Chain Expenditures 2019 Addendum," 2019, <http://www.acgov.org/sustain/documents/2019SupplyChainAddendum.pdf>.

<sup>8</sup> "Ensuring Safe, Accountable, and Circular Solutions for Building Products," San Francisco Environment Department, accessed November 29, 2022, <https://sfenvironment.org/building-materials-management>.

## Vision 2026 Alignment

This measure aligns with the Vision 2026 element Prosperous and Vibrant Economy and the 10X goal of Accessible Infrastructure as it looks to expand the sharing economy, reduce unnecessary waste, keep durable goods in circulation, and make these programs accessible to all.

## Equity Description

This measure aims to expand access to durable goods and equipment for individuals who need them, removing barriers such as cost. Programs like tool-lending libraries can save community members money as they are not forced to purchase one-use items for special projects. Access to special equipment, such as laptops or software, can help people looking to improve their digital literacy. Seed lending libraries provide opportunities to plant native and pollinator-friendly plants while also expanding access to local produce. While using the equity tool did not lead to significant changes to the measure, we discovered most patrons of lending libraries use borrowed items for do-it-yourself projects requiring special equipment rather than using the items to make repairs. We therefore specified the growth of the sharing economy in the text of GEP 6b.

## Community Engagement

During the first community workshop, participants agreed that increased access to tool and equipment lending programs is beneficial and that expansion of repair programs and expertise would fill a current knowledge gap when it comes to repairing items. Among the online feedback forum participants who rated the proposed measure on participating in a regional collaborative for reuse and repair, the average priority rating on a scale of -100 to 100 was 69. An online feedback forum participant commented that “the County has a unique role to play in helping with reuse/repair (more circular economy/less trash).” During public input on the draft plan, one commenter noted the importance of locally accessible resources by stating, “Micro-neighborhood community reuse & repair programs and tool libraries are critical—people won’t travel across Alameda County for a tool (nor is that climate friendly),” and suggested development and use of “something app-based that allows people to easily access what’s available nearby and list other items for use.”



**Metrics and Outcomes**

This measure will be assessed based on whether submeasures are accomplished. The intended outcome is for the County to expand the circular economy in community-facing projects, thereby reducing waste and increasing access to upstream solutions.

**GEP 7: Expanding Edible Food Recovery**

**Strengthen infrastructure, partnerships, and in-County catering and food procurement practices for edible food recovery and reduction of food waste to reduce methane generation in landfills and encourage highest and best use of food.**

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
a. Expand edible food recovery efforts by partnering with food banks and food rescue organizations such as the Alameda County Food Bank.	<b>DSAL</b>	GHG:  Community/Global  Resilience:  Community	Capital: Current  +     Personnel:    	 <b>Community Prosperity Health and Safety</b>

### GEP 8: Sourcing Healthier, Low-Carbon Food

Leverage the County’s purchasing power to source low-carbon and local foods in County operations in alignment with the County’s Good Food Purchasing policy in County buildings, such as detention facilities.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
a. Through County contracting, subcontracting, and catering purchases for congregate settings, increase the purchase of produce grown and processed by local businesses to enhance the local foodshed and reduce emissions associated with distribution and transport.	SSA ACSO Probation	GHG:  Community/Global  Resilience:  Supply Chain	Capital: Current   Personnel: 	 Community Prosperity Natural Resources Protection

### GEP 9: Integrated Circular Food Economy

Support County farmers and a local sustainable food economy through local land use and neighborhood-based programs.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
a. Develop a plan for increasing the amount of local and regeneratively grown produce. Elements of the plan will include identifying sites with food-producing capabilities, creating a timeline to procure and convert land for agriculture production, and securing purchase or long-term lease agreements.	DSAL	Resilience:  Community	Capital: Current   Personnel: 	 Health and Safety Natural Resources Protection

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
b. Create a community-supported agriculture program to increase consumption of regeneratively grown produce.	<b>DSAL</b>	Resilience:  <b>Community</b>	Capital: Current  +    Personnel:    	   <b>Community Prosperity</b> <b>Health and Safety</b> <b>Natural Resources Protection</b>
c. Develop, open, and operate five new food hubs throughout the county to further expand the work of promoting regenerative agriculture, workforce development, and local food systems.	<b>DSAL</b>	GHG:  <b>Community/Global</b>  Resilience:  <b>Community</b>	Capital: Current  +    Personnel:    	  <b>Community Prosperity</b> <b>Natural Resources Protection</b>

### Background and Description

This set of measures (GEP 7 through 9) reflects the work of ALL IN Eats, launched in 2020 in partnership with DSAL, ALL IN, the Board of Supervisors’ District 3 Office, CBOs, and local government partners. ALL IN Eats stems from an antipoverty initiative (ALL IN) which was created in 2014 by then Supervisor Wilma Chan to resolve issues related to employment, health care, food security, and senior services, through a County-led collaboration between community and government. (ALL IN Eats was housed in the District 3 Office. As part of a reorganization effective July 2022, the Board of Supervisors directed DSAL to implement the ALL IN Eats business plan in coordination with community partners.)

ALL IN Eats seeks to support a robust circular food economy in the county by developing and scaling up a food system that grows healthy and nourishing food, prevents waste and pollution, revives natural ecosystems through regenerative agriculture, prioritizes the local economy, and focuses on equity. Achieving these goals requires a shift in the current production, aggregation, processing, distribution, and recovery of food. Much of ALL IN Eats’ work is external facing, such as supporting new food hubs and expanding edible food recovery throughout the county. However, internal County services and operations can support elements of this work, such as by recovering edible food in County facilities and spending County dollars to prioritize purchasing local and sustainably grown produce for congregate settings and County events and meetings.

In 2010, DSAL launched the urban agriculture social enterprise (Dig Deep Farms) to improve individual and community well-being through fresh, locally grown food, jobs, and skill building. Food is grown using permaculture and regenerative agriculture practices and prescribed as part of the Recipe4Health program. The enterprise also hosts a six-week internship program for recently incarcerated people where they receive training in permaculture design and urban farming. The program provides skill development as well as a pathway for employment at the farm and related operations.

In January 2021, the Board of Supervisors unanimously adopted [the Good Food Purchasing Policy](#). The policy requires the County to evaluate current food purchases against the [Good Food Purchasing standards](#) to see how well our food purchases support a healthy, local, sustainable, and fair food supply chain. Given the County's spending of over \$20 million annually on food purchases for detention facilities,<sup>9</sup> this initiative provides

opportunities for social, economic, and environmental responsibility at a large scale. The resolution invites smaller County departments and agencies to implement Good Food Purchasing principles, such as offering plant-based options at all meetings and events.

## Vision 2026 Alignment

These measures align with the Vision 2026 elements of a Prosperous and Vibrant Economy, a Healthy Environment, and Safe and Livable Communities as they seek to advance economic, environmental, and social benefits for the community. These measures also align with the 10X goals of Eliminate Poverty and Hunger, Employment for All, and Crime Free County with their focus on food and alleviating food insecurity by decreasing food waste and preparing and connecting residents to climate-related jobs.

## Equity Description

DSAL's work is guided by building relationships and investing in the financial, human, social, cultural, political, natural, and built capital that communities need to thrive. The nonprofit started by offering extracurricular activities and programs for youth in the unincorporated communities of Ashland and Cherryland, filling a gap in opportunities. In the process, DSAL discovered the connections between lack



<sup>9</sup> "Alameda County Passes Resolution Bringing 'Good Food' to Correctional Facilities," Good Food Purchasing Program, accessed November 29, 2022, <https://goodfoodcities.org/alameda-county-passes-resolution-bringing-good-food-to-correctional-facilities>.

of investment and inadequate resources to fulfill basic needs. Through programs operated by the Alameda County Sheriff's Office, DSAL, Recipe4Health, and other community and public and private partners, ALL IN Eats has begun to achieve the triple bottom line of economic security, social well-being, and environmental benefit to the communities served. These measures will continue those efforts for long-lasting and powerful benefits.

## Community Engagement

Sixty-five percent of public survey respondents stated it was “very important” for the GOCAP to prioritize actions that support social equity and vulnerable community members and indicated that the most important 10X goals are Eliminate Homelessness and Eliminate Poverty and Hunger. During the door-to-door survey, 80 percent of those interviewed said improving the economy and creating jobs was “very important” while 79 percent of those interviewed said improving social equity and supporting historically underserved communities was “very important.” When asked to name a top challenge they are currently facing, respondents to the door-to-door survey named “the increasing cost of living,” “survivability,” and “inflation.” The intersection of workforce training and economic opportunities with local, regenerative agricultural operations helps address needs from both an economic and sustainability perspective. Support for this intersection came up in the employee survey as well. When asked to share work priorities for the next three to five years, employees gave responses such as “increase green employment opportunities for justice involved youth” and “making access to fresh foods more readily available in low-income communities, while keeping the costs down. This will impact obesity, diabetes, and hypertension, which is disproportionately killing people of color.” These measures work to directly meet these goals by addressing food insecurity/lack of access to healthy food and providing climate-related work opportunities for residents.

## Metrics and Outcomes

These measures will be assessed based on whether submeasures are accomplished. Metrics such as number of programs begun will be considered by implementing stakeholders.



*Dig Deep Farms operates six farms in Alameda County using regenerative agriculture practices. The farms provide access to healthy food and offer job-training opportunities.*

# Sustainable Materials Management

## MEASURES

### Technical Assistance and Outreach

SMM 1: Operational Program Implementation

SMM 2: Education and Outreach Strategy

### Circular Economy

SMM 3: Reuse Hierarchy Policy

SMM 4: Reuse and Repair Implementation

SMM 5: Zero-Waste Events

### Procurement

SMM 6: Strengthening Purchasing Policy

SMM 7: Construction and Demolition



This section covers how we will implement upstream solutions to reduce the amount of waste generated in County operations.

## Section Introduction

### Description

This section details the County's current plan for sustainable materials management. It represents a shift from the Alameda County Climate Action Plan for Government Services and Operations Through 2020, which set goals for waste diversion and paper reduction in County operations. China's "National Sword" policy, which was enacted in January 2018 and banned the import of most plastics and other materials to Chinese recycling processors, forced the County to reimagine our waste diversion strategies. In response, we have developed measures to ensure recycling and composting are the last necessary options for materials. We are focusing on building a circular economy in County operations (that is, expanding reuse and repair efforts) and implementing operational changes and outreach strategies to build support and buy-in for conscious consumption of materials by County employees.

By incorporating circular economy principles in our operations and moving away from linear economy and disposal-based practices, the County will reduce emissions from the upstream processes of extracting, producing, manufacturing, transporting, and distributing new items and resources. A [2021 Ellen MacArthur Foundation report](#) found that California's shifting to a circular economy would



*The Alameda County General Services Agency's Property and Salvage Department works to reuse office furniture, equipment, and supplies, reducing waste and saving money.*

lead to an annual reduction of 6 million metric tons of CO<sub>2</sub>e (MMTCO<sub>2</sub>e). This reduction in emissions is equivalent to the greenhouse gas (GHG) emissions from energy used by 755,778 homes in one year.<sup>1</sup> Implementing these measures will also reduce emissions of methane, a climate pollutant 84 times more potent than carbon dioxide,<sup>2</sup> by diverting more organic waste from landfills to be composted. As a leader in championing innovative and effective sustainability programs and initiatives, the County has an opportunity to carry out these cutting-edge initiatives.

<sup>1</sup> "Greenhouse Gas Equivalencies Calculator," U.S. EPA, updated March 2022, <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator#results>.

<sup>2</sup> "California's Short-Lived Climate Pollutant Reduction Strategy," CalRecycle, accessed December 5, 2022, <https://calrecycle.ca.gov/organics/slcp>.

These efforts will build on our previous accomplishments, which include successfully rolling out recycling and composting programs in the vast majority of the County's building portfolio and reducing our paper usage by 58 percent since 2010 through transitioning to digital document management. Our current shift in focus from the lower end of the recycling hierarchy (recycle/compost) to upstream solutions is in line with the [Alameda County Countywide Integrated Waste Management Plan's](#) countywide goal of landfill obsolescence by 2045, requiring a focus beyond collection and processing of materials. This shift also fits our new reality: the COVID-19 pandemic changed the way the County thinks about providing services to our community. For instance, our County Administrator put forward guidance on virtual first service delivery, opening a path to a future that requires fewer materials and allows us to reduce our waste generation further.

### Greenhouse Gas Reductions

The County's [Supply Chain Sustainability Report](#), issued in 2015 and updated in 2019, discovered emissions caused by County purchasing are approximately 191,000 MTCO<sub>2</sub>e, an amount about four times greater than emissions associated with County operations such as landfilling materials. The County's purchases of goods, food, and IT equipment contribute approximately 17 percent of supply chain emissions generated from the total County

*Nandan R. of Pleasanton emphasized rebuilding and recycling in this submittal to StopWaste Schools' 2022 May the 4Rs Be With You Art & Media Contest.*



expenditures.<sup>3</sup> Actions in this section aim to achieve significant reductions by focusing on emissions generated in the supply chain and other upstream avenues. Targeting these emissions through initiatives such as edible food recovery, reuse, repair, and implementation of stronger purchasing standards, will significantly reduce County greenhouse gas emissions and move us toward our goal of achieving net zero emissions by 2045.

<sup>3</sup> "Analysis of Sustainability Impacts of Alameda County Supply Chain Expenditures 2019 Addendum," Alameda County GSA Office of Sustainability, 2019, <http://www.acgov.org/sustain/documents/2019SupplyChainAddendum.pdf>.

## Resilience Benefits Overview

Shifting toward a more circular economy by incorporating waste prevention and expanding reuse and repair of goods within our operations will reduce our reliance on outside entities and vulnerability to corresponding effects, such as the supply chain problems seen during the COVID-19 pandemic. By strengthening edible food recovery programs, we will help build community resilience by providing edible food to food-insecure populations. As a government entity, the County can also improve regional resilience through our operations. For instance, prioritizing locally sourced building materials in our construction projects and salvaging building materials and goods in our deconstruction projects will support the development of a regional reuse market and encourage other entities to do the same.

## Equity Overview

Waste-related infrastructure, such as sorting facilities, landfills, and incineration sites, is often located near disadvantaged communities. The last plan focused on downstream waste efforts, such as the separation of materials for disposal. Although properly sorting waste for diversion is important, focusing solely on downstream actions does not consider the upstream processes to

create the product, whether oil is extracted and refined to create plastics, metals are mined to create aluminum cans and electronics, or trees are cut down for paper and cardboard. Extracting virgin materials and manufacturing new products often leads to damaging consequences for surrounding communities and the environment, such as toxic air from plastic refineries linked to asthma and cancer, or water contamination caused by metal mining. These consequences often harm low-income and BIPOC communities in the United States and the Global South.

In contrast, waste reduction efforts such as reuse and repair initiatives bring benefits to a community beyond simple waste reduction. For example, reused materials are often sold at significantly discounted prices, supporting local job creation and affordable goods and building materials. Repairing goods boasts similar benefits. For every 1,000 tons of electronics, landfilling this material creates less than one job<sup>4</sup> while repair efforts create 200 jobs.<sup>5</sup> According to a market research report published by IBISWorld, “The electronics and computer repair industry in the United States supports 56,625 small businesses that employ 143,637 people, for a total of \$19 billion in annual revenue.”<sup>6</sup> Moving to an upstream-focused approach of sustainable materials management will help us achieve the triple bottom line of environmental, economic, and social benefits. The feedback received from our community engagement efforts,

<sup>4</sup> “Electronics Recycling: Economic Opportunities and Environmental Impacts,” Illinois Department of Commerce and Economic Opportunity, accessed December 2, 2022, [https://www.slideshare.net/Bill\\_Martin/ewaste-fact-sheet](https://www.slideshare.net/Bill_Martin/ewaste-fact-sheet).

<sup>5</sup> Beth Porter, *Reduce, Reuse, Reimagine: Sorting Out the Recycling System*, (Rowman & Littlefield Publishers, 2018).

<sup>6</sup> “Electronic and Computer Repair Services Industry in the US – Market Industry Report,” IBISWorld, updated June 23, 2022, <https://www.ibisworld.com/united-states/market-research-reports/electronic-computer-repair-services-industry>.

along with the results from the equity tool, were used to inform and modify the Sustainable Materials Management section's measures. Specifics on how this data shaped the measures are detailed for each measure.

### **Vision 2026 Alignment**

The proposed strategies in this section align with the Healthy Environment and Prosperous and Vibrant Economy Vision 2026 elements and the Vision 2026 10X goals of Accessible Infrastructure, Employment for All, and Eliminate Poverty and Hunger by reducing greenhouse gas emissions, increasing accessibility to upstream waste solutions, creating job opportunities, and increasing food access.

### **Monitoring and Reporting**

In the last plan, the Solid Waste action area focused on rolling out recycling and composting programs at County facilities. Such efforts could easily be tracked via participation rates and estimated pounds or cubic yards of material diverted. Tracking metrics associated with upstream initiatives and waste prevention presents a challenge, but qualitative and quantitative opportunities are available. Qualitative metrics include conducting annual representative waste audits at County facilities, implementing new source-reduction programs, and tracking the number of individuals engaged in outreach efforts and participating in these new programs. Quantitative metrics include tracking County goods and materials diverted from the landfill through reuse, repair, and edible food recovery programs.



*The Altamont Landfill operates a composting facility in Alameda County that converts up to 500 tons of organic waste per day into usable compost to support healthy soil.*

## Measures

### Technical Assistance and Outreach

#### SMM 1: Operational Program Implementation

Implement programs and projects to reduce waste generation at County facilities and manage generated waste in a sustainable manner for maximum landfill diversion.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
a. Facilitate operational changes to prevent use of unnecessary single-use disposables and promote the sustainable use of reusable, high-quality, and durable products, such as reusable dishware in food service.	<b>GSA-Sustainability</b>	GHG:  <b>County Operations</b>  <b>Supply Chain</b>	Capital: <b>Current</b>  +    Personnel:    	 <b>Return on Investment</b>
b. Conduct annual representative waste audits in consultation with contacts at County facilities to better understand the current waste stream to improve programs and outreach.	<b>GSA-Sustainability</b>	GHG:  <b>County Operations</b>	Capital: <b>Current</b>  +    Personnel:     <b>Existing</b>	—

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>c. Implement a plan to recover high-quality, edible food in current and future municipal food operations to benefit food-insecure populations, where opportunity exists to do so. Update building design guidelines to reflect capacity planning requirements for future food-generating County facilities.</p>	<p><b>GSA-Sustainability</b> HCSA</p>	<p>GHG:    <b>County Operations</b></p> <p>Resilience:    <b>Community</b></p>	<p>Capital:  <b>Current</b>   + </p> <p>Personnel:  </p>	 <b>Community Prosperity</b> <b>Health and Safety</b>
<p>d. Expand linkages to paid employment through litter abatement programs for individuals with barriers to traditional employment, while connecting the participants to additional job training and career opportunities.</p>	<p><b>SSA</b></p>	<p>Resilience:    <b>Community</b></p>	<p>Capital:  <b>Current</b>   + </p> <p>Personnel:  </p>	 <b>Community Prosperity</b>

### Background and Description

The County has successfully implemented waste diversion programs at nearly all of our facilities while actively implementing initiatives to reduce waste and achieve compliance with statewide mandates, including [California Senate Bill 1383 \(SB 1383\)](#). The most comprehensive waste and recycling state law in 30 years, SB 1383 seeks to reduce the organic material sent to landfills to decrease methane emissions and increase recovered edible food for food-insecure populations.

This measure builds on existing efforts to maximize waste diversion through conducting comprehensive outreach, implementing innovative programs, and exploring upstream waste reduction strategies by developing edible food recovery plans, creating facility-specific outreach and programs, and exploring job creation opportunities in County operations. As it is feasible, we will seek opportunities to phase out single-use plastics and move to durable, reusable, high-quality alternatives. This measure will support creating a healthier Alameda County for all while reducing our carbon footprint.

## Vision 2026 Alignment

This measure aligns with the Vision 2026 10X goals of Employment for All and Eliminate Poverty and Hunger by providing job opportunities to those with barriers to traditional employment and helping ensure food-insecure populations have access to food.

## Equity Description

While this measure's main goal is implementing programs to divert maximum waste from landfills in County operations, some elements promote equity within the community. Both the non-profit [Downtown Streets Team](#) and San Jose's [Cash for Trash Program](#) show how a waste-related issue such as litter abatement can also connect to social services. Both programs provide financial incentives or support services to unhoused individuals so they can rise out of homelessness while gaining job skills and beautifying the community. Historical economic disinvestment in low-income BIPOC communities has limited their access to grocery stores and other healthy food options. Edible food recovery provides an opportunity to increase equity. An equitable approach not only recognizes and uncovers the root cause of systematic racism but uses the scope of our County operations to mitigate harm and move toward permanent regional solutions, such as directing edible food recovery to food-insecure populations and developing job opportunities for people with barriers to traditional employment.

Applying the equity tool allowed us to further refine the language to ensure equity components were explicitly stated. For example, phrases such as "food-insecure populations" were added to this measure to state our intended outcomes of the measure clearly. In this instance, the aim of the measure is ensuring food recovery efforts serve those who would most benefit.

## Community Engagement

In the public survey and focus group sessions, many respondents raised concerns about the prevalence of litter and single-use plastics and the lack of composting and recycling in general spaces. This sentiment was prioritized in the online feedback forum with one respondent commenting, "We need to be rid of single-use disposables! The County needs to lead by example." The idea of creating a litter



*Site visits help the County identify successes of and improvements needed to recycling and composting programs at our facilities.*

abatement program with participation from at-risk individuals (i.e., individuals with employment barriers) rose directly from public feedback in listening sessions: specifically, that the County needs to address litter in the community and provide more job opportunities. In the door-to-door survey, when asked to complete the following sentence, “In 10 years, I would like my community to be or have \_\_\_\_\_” respondents answered with “clean streets and less trash,” “less pollution and clean air,” and “clean oceans.” Our robust strategy to continue creating effective composting and recycling programs within County operations and to implement reusables and move away from unnecessary single-use plastics echoes public sentiment.

Door-to-door survey respondents showed strong support for the job creation opportunities in addressing climate change. Eighty percent of those surveyed felt that “improving the economy and creating jobs” was “very important” while 79 percent of those surveyed felt that “improving social equity and supporting historically underserved communities” was “very important.” Lastly, when asked, “What is a challenge that you currently face in your community?” respondents mentioned “the increasing cost of living,” “survivability,” and “inflation.”

## Metrics and Outcomes

Successful implementation of this measure will result in less waste sent to landfills, decreased food insecurity, cleaner County rights-of-way, and greater job opportunities. This measure will be assessed based on whether submeasures are accomplished.



## SMM 2: Education and Outreach Strategy

Through education and outreach, support departments to increase participation in and improve waste reduction practices in County operations.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
a. Partner with departments and agencies to incorporate targeted waste prevention practices through existing training avenues, such as building-specific training and online learning.	<b>GSA-Sustainability</b>	GHG:  <b>County Operations</b> <b>Supply Chain</b>	Capital: <b>Current</b>  +    Personnel:    	—
b. Provide technical assistance to stakeholders to support the successful adoption of department practices around the efficient consumption of materials including paper, plastic, and other commonly used items.	<b>GSA-Sustainability</b>	GHG:  <b>County Operations</b> <b>Supply Chain</b>	Capital: <b>Current</b>  +    Personnel:    	 <b>Return on Investment</b>

### Background and Description

The County has successfully trained staff at all County facilities on waste reduction and diversion practices and conducts regular outreach to reinforce behaviors and to educate new employees. This measure builds upon these training and support efforts to continue decreasing waste from County operations while providing guidance and resources to maximize waste diversion/sorting. In addition, we will provide technical assistance to help departments and agencies transition to procedures that allow for sustainable use of County goods, such as print materials, furniture, office equipment, and more.

## Vision 2026 Alignment

The measure aligns with the Vision 2026 10X goal of Accessible Infrastructure by making proper waste reduction and reuse infrastructure universal and easily accessible in County facilities and procedures, as we have with recycling and composting infrastructure.

## Equity Description

The education and outreach strategies in this measure must be designed for potential language and literacy level barriers. Although application of the equity tool did not lead to significant changes to the measure language, the tool highlighted ways to address potential inequities in outreach and illuminated specific strategies for implementation. These strategies include prioritizing visual formats versus text-only formats, creating workplace-specific materials, and reflecting cultural practices where appropriate. By promoting efficient use of materials, we will decrease the process of extracting virgin materials and manufacturing new products, which have the potential to harm surrounding communities and the environment.

## Community Engagement

When asked what services the County could provide to help businesses/organizations reduce waste and associated emissions, survey respondents indicated specifics, such as “clear guidelines on recycling and composting” and “county-wide standards and programs that can scale up efficiently” (e.g., ordinances). These strategies can be applied to County government operations and services as well. In the employee climate survey, many employees expressed interest in reducing paper use and transitioning to electronic alternatives such as digital signatures. One employee specifically called for installing more water dispensers to reduce use of single-use plastic bottles.

## Metrics and Outcomes

This measure will be assessed based on whether submeasures are accomplished, along with annual evaluations of waste operations in County facilities as described in SMM 1b. Individual projects will set targets once specific scopes are determined.



*The County's battery recycling program provides employees an easy way to properly dispose of used batteries at work.*

## Circular Economy

### SMM 3: Reuse Hierarchy Policy

Establish a culture of reuse through innovative policies and programs that ensure durable furniture and equipment maintain their highest and best use.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Strengthen the <a href="#">Environmentally Preferable Purchasing Resolution and Policy</a> requirements of exploring alternative options before buying new products for goods such as office or ergonomic equipment, IT equipment, and furniture. Alternative options include using recirculated goods from GSA Property and Salvage's inventory, leasing or renting, and purchasing brand-new items with green purchasing standards. Explore if additional policy support is needed.</p>	<p><b>GSA-Sustainability</b> GSA-P&amp;S GSA-Procurement GSA-Real Property</p>	<p>GHG:  <b>Supply Chain</b></p> <p>Resilience:  <b>County Operations</b></p>	<p>Capital: Current  +   </p> <p>Personnel:   </p>	<p> <b>Return on Investment</b></p>
<p>b. Explore expanding rental and leasing programs of select furniture and other durable goods (in place of buying new) to incentivize short-term management of special/one-time use goods and equipment that meet client business needs. Develop a cost-benefit analysis mechanism to evaluate renting and leasing versus purchasing.</p>	<p><b>GSA-Sustainability</b> <b>GSA-Real Property</b> GSA-Procurement</p>	<p>GHG:  <b>Supply Chain</b></p> <p>Resilience:  <b>County Operations</b></p>	<p>Capital: Current  +   </p> <p>Personnel:   </p>	<p> <b>Return on Investment</b></p>

## Background and Description

The County has well-established recycling and composting programs throughout our owned and leased facilities. We are now shifting our focus from waste separation and sorting to waste prevention and other upstream solutions.

This measure embraces the “reuse” tier of the reduce, reuse, and recycle hierarchy by establishing a culture of recirculating durable furniture and equipment within our operations. The County conducted two studies to analyze the estimated greenhouse gas emissions, particulate pollution (PM<sub>2.5</sub>), and human health impacts that result from our demand for goods and services. Our most recent study of 2019 expenditures discovered emissions from County purchasing (e.g., buying furniture, equipment, and food for congregate settings) are four times greater than emissions associated with County operations (e.g., business-related travel and facility energy use).<sup>7</sup> While we have much less influence over supply chain emissions than our operational emissions, we identified several actions in the GOCAP to target emissions from the supply chain and other upstream avenues.

One component of this measure is expanding the County’s [Environmentally Preferable Purchasing Resolution and Policy \(R-2011-108\)](#) by establishing a reuse hierarchy for County departments and employees to follow when looking for goods such as furniture and equipment. The goal is to ensure unnecessary new purchases are no longer the default option in County operations and that reuse and rental options are explored first. We will expand our reuse program in partnership with the GSA Property and Salvage Department, which houses an extensive inventory of refurbished and durable items. Second, participation in leasing and rental programs will be expanded in place of purchasing new items for one-time or special use. Since cost-benefit results can vary depending on the specific products, we will develop an evaluation mechanism to determine when it is best to outright purchase an item versus leasing or renting it. If successfully implemented, the County will reduce the amount of waste we produce and could save millions of dollars. Finally, we will use green purchasing standards when buying brand-new items if options higher up in the reuse hierarchy are not available.



<sup>7</sup> “Analysis of Sustainability Impacts of Alameda County Supply Chain Expenditures 2019 Addendum,” Alameda County GSA Office of Sustainability, 2019, <http://www.acgov.org/sustain/documents/2019SupplyChainAddendum.pdf>.

## Vision 2026 Alignment

This measure aligns with the Prosperous and Vibrant Economy Vision 2026 element and the 10X goal of Accessible Infrastructure, as we will extend the life cycle of existing goods and materials and support the development of a circular economy.

## Equity Description

By building reuse into County culture and promoting the purchase of new items with green purchasing standards as the last option, we will reduce the amount of new materials purchased and the subsequent impacts of extracting, refining, manufacturing, transporting, and disposing of materials, particularly on low-income BIPOC communities in the United States and the Global South.

## Community Engagement

In the first community workshop, participants noted that education about waste sorting and diversion varies by jurisdiction and recommended the County provide more education on reuse opportunities since this presents a greater opportunity for impact. Public input on SMM measures in the online feedback forum called on the County to minimize using single-use plastic and other disposable items and shift toward upstream waste solutions. During public input on the draft plan, one commenter recommended the County “research and develop priority items to purchase that are durable, reusable items to support long-term greenhouse gas emissions and waste reduction.” This idea of procuring durable and reusable goods is addressed in SMM 6.

## Metrics and Outcomes

This measure seeks to advance our operations toward zero waste through emphasizing reuse and expanding and rethinking current County reuse systems. By keeping County assets in circulation, we will continue to reduce our waste generation and increase the longevity of durable goods. This measure will be assessed based on whether submeasures are accomplished.

### SMM 4: Reuse and Repair Implementation

Foster a culture of reuse and repair in the County by developing centralized and decentralized resources to keep viable County assets in circulation.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Pilot and, if successful, expand an online, internal agency-to-agency equipment sharing system for used County furniture and equipment. If feasible, expand to invite community-based organization (CBO) vendors to participate, to spur the local reuse economy.</p>	<p><b>GSA-P&amp;S</b> GSA-Sustainability</p>	<p>GHG:  Supply Chain</p>	<p>Capital: Current  +   </p> <p>Personnel:    </p>	<p>  Flexible Services Return on Investment</p>
<p>b. Join a regional reuse network establishing a market for resale and donation of County surplus goods.</p>	<p><b>GSA-Sustainability</b></p>	<p>GHG:  Community/Global</p>	<p>Capital: Current  +   </p> <p>Personnel:    </p>	<p> Return on Investment</p>
<p>c. Implement borrowing programs of technical equipment, durable goods, and various toolkits for County use.</p>	<p><b>Library</b></p>	<p>GHG:  Community/Global</p>	<p>Capital: Current  +   </p> <p>Personnel:    </p>	<p> Return on Investment</p>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
d. Explore developing a repair job training initiative as part of a reentry program for individuals facing barriers to traditional employment.	<b>GSA-P&amp;S</b> <b>Probation</b> GSA-Sustainability	GHG:  Supply Chain	Capital: Current  Personnel: 	 <b>Community Prosperity</b> <b>Return on Investment</b>

**Background and Description**

This measure explores the development of reuse, repair, and borrowing programs, which will extend the life of County goods and materials. To follow circular economy principles in our County operations, reuse and repair of viable goods must be the default before buying new items unnecessarily. The County currently does some repairing of durable goods, but staffing and time constraints limit these efforts, and they are not a substantial component of the reuse program. By expanding and increasing the accessibility of the County reuse program, implementing borrowing programs, and joining regional reuse networks, the County will reduce the amount of waste produced (in our own operations and regionally) and could save millions of dollars. One example of an opportunity we are exploring is participating in the regional reuse network San Francisco is developing through [a grant-funded pilot project](#). The project seeks to create an online materials exchange for commercial construction, small businesses, and nonprofits to easily procure salvaged and surplus items

This measure also looks at creating a repair job training initiative for people to gain both broad skills and technical training as part of a reentry program like the Alameda County Sheriff’s Work Alternative Program and the Alameda County Probation Department’s reentry and public safety realignment efforts. Both programs seek to help those who have encountered the criminal justice system develop skills to help them transition to life as productive members of society.



*The GSA Property and Salvage Department uses surplus parts to make repairs to extend the life of County goods.*

## Vision 2026 Alignment

This measure aligns with the Vision 2026 10X goals of Accessible Infrastructure and Employment for All by increasing accessibility to reuse and repair efforts and creating jobs for people facing barriers to traditional employment.

## Equity Description

By assisting with repair efforts of County goods, individuals in reentry programs can develop technical and soft skills for gainful employment while also helping to keep County items in circulation and out of the landfill.

## Community Engagement

Public survey respondents indicated they wanted the County to provide more job opportunities. As a result, we included a submeasure on developing a repair job training program as part of a reentry effort to assist people with barriers to employment. The online feedback forum reflected support for this initiative with one respondent commenting, “Helping create paths to green jobs is important.” During public input of the draft plan, one respondent commented on the benefits the initiative would bring, “Huge climate benefits, waste reduction, community job creation resulting in higher incomes and quality of life/reduced crime, low or no cost refurbished goods, community pride, keep historic and culturally significant items in the community.” During the second community workshop, a County employee noted that some employees cannot travel to Property and Salvage’s physical warehouse to view available items due to distance and accessibility challenges. The participant supported the idea of an online resource to access and order items. In the online feedback forum, one participant recommended the County “reduce waste by preventing surpluses in the first place.” This comment shows support for both the online reuse inventory and other reuse initiatives described in this measure.

## Metrics and Outcomes

This measure will be assessed based on whether submeasures are accomplished.



*Tool-lending libraries such as Berkeley's reduce barriers to home improvements and allow tools to be reused.*

## SMM 5: Zero-Waste Events

Provide resources and the framework so that County event planners can plan all internal and public events and meetings with zero-waste event principles.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Update the <a href="#">Green and Healthy Events and Meetings</a> program guidelines and resources to increase the ease and accessibility of hosting a zero-waste County event. Support employees to use reusable serving ware, patronize certified green businesses or small, local, and emerging businesses (SLEBs) when possible, use compostable or recyclable materials as needed, and recover leftover edible food for human consumption.</p>	<p><b>GSA-Sustainability</b></p>	<p>GHG:</p>  <p><b>County Operations</b> <b>Supply Chain</b></p>	<p>Capital:</p> <p>Current</p>  +    <p>Personnel:</p>    	   <p><b>Community Prosperity</b> <b>Health and Safety</b> <b>Natural Resources Protection</b></p>

### Background and Description

As a large organization, the County hosts many meetings and events annually. One of the biggest problems associated with large events is the amount of waste produced. A study in California found that public events generate [2.5 pounds of waste](#) per person.<sup>8</sup>

As part of employee engagement efforts in the last plan, a cross-agency team of County employees developed planning resources and a certification checklist for a broad range of events and meetings, resulting in the Green and Healthy Events and Meetings program. Event guidelines included strategies to minimize emissions and waste, such as locating events near public transit, using reusable serving ware, and avoiding unnecessary printing and single-use items. The program succeeded beyond its goals and engaged hundreds of event planners and over 18,000 event participants to build a new County culture of sustainable and healthy gatherings.<sup>9</sup>

<sup>8</sup> “Venues and Events: Reducing Waste,” CalRecycle, accessed October 27, 2022, <https://calrecycle.ca.gov/venues>.

<sup>9</sup> Sarah Church, “Green & Healthy Events and Meetings: Greening Decentralized Purchasing to Implement a Climate Action Plan,” Alameda County, 2016, [https://www.acgov.org/sustain/documents/casestudy\\_2016splc-greenandhealthy.pdf](https://www.acgov.org/sustain/documents/casestudy_2016splc-greenandhealthy.pdf).

In this measure, we seek to curb the amount of waste from our events by updating guidelines to make hosting zero-waste County events easier and more accessible so such events become the standard in County operations. We will focus on source reduction through using more reusable materials and offering compostable or recyclable alternatives when reusables are not possible. In addition, we will promote certified green businesses and small, local, and emerging businesses (SLEBs) to reduce events' carbon footprint while helping the local economy. Finally, we will minimize food waste by recovering leftover edible food to distribute to the community while decreasing landfilled organic waste, which makes up about 20 percent of methane emissions in California.<sup>10</sup>

### Vision 2026 Alignment

The measure aligns with the Vision 2026 10X goals of Accessible Infrastructure and Eliminate Poverty and Hunger as we will provide guidelines and resources for hosting sustainable events and increase access to healthy, nutritious foods through edible food recovery efforts.

### Equity Description

The application of the equity tool illuminated the need to highlight hosting a zero-waste event with ease, so we included this specific language and described detailed strategies in the submeasure.

### Community Engagement

More than half of the public survey respondents (56 percent) considered “zero waste in County operations” a valuable strategy to reduce operational greenhouse gas emissions and prepare for climate impacts. In the online feedback forum, one respondent commented, “Having zero waste events, supporting small businesses, and encouraging green businesses are very important.”



<sup>10</sup> “California’s Short-Lived Climate Pollutant Reduction Strategy,” CalRecycle, accessed December 5, 2022, <https://calrecycle.ca.gov/organics/slcp>.

## Metrics and Outcomes

This measure is targeted toward gatherings of over 50 attendees where food purchased with County funds is served. By setting an initial precedent for larger events and focusing on the largest waste reduction opportunity (food), we can continue to refine and expand our efforts over the coming years to smaller events.

## Procurement

### SMM 6: Strengthening Purchasing Policy

**Develop and implement purchasing standards for high-impact product categories, in line with the Board-adopted Environmentally Preferable Purchasing Policy (R-2011-108) and the Supply Chain Sustainability Assessment reports.**

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
a. Establish a directive for minimum environmental performance standards and targets for the purchase of high-priority goods, such as furniture, IT equipment, and office supplies, using sustainability standards such as recycled content or third-party certifications.	<b>GSA-Sustainability</b> GSA-Procurement ITD	GHG:  Supply Chain	Capital: Current  Personnel: 	 <b>Community Prosperity</b> <b>Natural Resources Protection</b>
b. Design an approach for County vendors to source select products in cost-effective, sustainable varieties, and create demand for producers to manufacture responsibly. In doing so, the County will help build the market for these goods and practices and make them more accessible.	<b>GSA-Sustainability</b> GSA-Procurement	GHG:  Community/Global Supply Chain	Capital: Current  Personnel: 	 <b>Community Prosperity</b> <b>Flexible Services</b> <b>Natural Resources Protection</b>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
c. Continue the Countywide implementation of the Green IT Initiative, which guides sustainable IT procurement and use. Explore opportunities for source reduction through initiatives such as replacing desk phones with digital softphones, eliminating fax machines using eFax, reducing the number of printers in office spaces using multifunction devices, and expanding participation in the Information Technology Department’s technology reuse program throughout the County.	<b>ITD</b>	GHG:  Supply Chain	Capital: Current  Personnel: 	 <b>Community Prosperity</b> <b>Flexible Services</b> <b>Natural Resources Protection</b>

**Background and Description**

With nearly 10,000 employees, the County is one of the biggest employers in Alameda County. Given the County’s annual spending of over \$1.1 billion on goods and services,<sup>11</sup> the enhanced purchasing standards outlined in this measure can profoundly affect the local environment and market for sustainable goods. With the growing global shift toward circular economies, we are in a unique position to implement these ideas in our own purchasing and make them feasible for other entities. According to the [U.S. Department of Agriculture Economic Research Service](#) and the [U.S. Department of Commerce’s Bureau of Economic Analysis](#), implementing a circular economy in California would bring in \$142 billion by 2030. We can play a key role in this economic shift by developing the circular economy in our own internal operations.

In 2011, the County adopted the Environmentally Preferable Purchasing Policy (R-2011-108), which provided four criteria to determine environmentally preferable alternatives for priority product categories. These were (1) prioritize waste reduction; (2) purchase products with recycled content; (3) purchase products that meet other environmental criteria defined in the policy; and (4) use third-party eco-labels when available. While extensive, the policy was ultimately optional for purchasers. In this measure, we aim to update and strengthen the policy and its goals by making this set of criteria a purchasing requirement for high-impact product categories such as furniture and office supplies. Using the County’s purchasing power, we intend to support sustainable vendors and products and help build a market and

<sup>11</sup> “Analysis of Sustainability Impacts of Alameda County Supply Chain Expenditures 2019 Addendum,” GSA Office of Sustainability, 2019, <http://www.acgov.org/sustain/documents/2019SupplyChainAddendum.pdf>.

demand for them. This will increase accessibility for other entities to purchase sustainably without traditional barriers (i.e., higher cost of sustainable goods).

### Vision 2026 Alignment

This measure aligns with the Vision 2026 10X goal of Accessible Infrastructure, as we will extend the life cycle of existing goods and build innovative infrastructure systems by aligning our technological needs to present conditions (such as the expansion of telework).

### Equity Description

Successful implementation of this measure will reduce the impacts of extracting, refining, manufacturing, transporting, and disposing of materials. Similarly, programs such as the Green IT initiative will reduce the e-waste sent to landfills or overseas (often to Southeast Asian countries), which are burdened by environmental and social problems resulting from e-waste. The application of the equity tool illuminated the need for firm policy (beyond general guidance), so we modified the measure to include setting a directive to develop and apply minimum environmental performance standards for purchasers to follow.

### Community Engagement

When asked what services the County could provide to help businesses/organizations reduce waste and minimize greenhouse emissions, public survey respondents expressed interest in technical assistance and education from the County on environmentally friendly products, testimonies of their benefits, and detailed explanations of their costs. During the first community workshop, several participants suggested the County encourage manufacturers and producers to stop making nonrecyclable items. This interest from the community provides an opportunity for us to lead and share best practices and procedures from our own sustainable purchasing. We can also leverage our purchasing power to support sustainable vendors and products, pushing the market toward these environmentally friendly practices and options.



**Metrics and Outcomes**

Metrics will be determined as appropriate to the high-priority product categories identified in these measures, and by evaluating the programmatic efforts to support advancement of the goals of this measure. The objective is to leverage the County’s significant purchasing power to create market demand for and accessibility of low carbon goods and services.

**SMM 7: Construction and Demolition**

**Advance circular economy principles in the built environment by diverting the maximum amount of material with a focus on salvaging for reuse during demolition and seeking opportunities to use recovered materials in new construction in project-appropriate ways.**

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
a. Identify project-appropriate deconstruction opportunities in facility renovation or demolition projects to promote the reuse of building materials in County facilities or other material exchange programs, supporting a regional circular economy.	<b>GSA-Capital Programs</b> GSA-Sustainability	GHG:  <b>Supply Chain</b>  Resilience:  <b>County Operations</b>	Capital: Current  Personnel: 	 <b>Natural Resources Protection</b>
b. Explore opportunities to support project-appropriate use of locally salvaged, reclaimed, refurbished, or otherwise reused building materials selection and furniture for new construction and tenant improvement projects.	<b>GSA-Capital Programs</b> <b>GSA-Sustainability</b>	GHG:  <b>Supply Chain</b>  Resilience:  <b>County Operations</b>	Capital: Current  Personnel: 	  <b>Natural Resources Protection</b> <b>Return on Investment</b>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>c. Require all new construction and major capital tenant improvement projects to provide documentation that the project meets the minimum 65 percent diversion required by the State of California Green Building Code. When diverting materials, prioritize salvage and reuse of materials over recycling, where feasible.</p>	<p><b>GSA-Capital Programs</b> GSA-BMD</p>	<p>GHG:  Supply Chain</p>	<p>Capital: Current  +   </p> <p>Personnel:    </p>	<p> Natural Resources Protection</p>

## Background and Description

The U.S. EPA estimates that construction and demolition (C&D) projects generated over 600 million tons of debris throughout the United States in 2018 alone—more than twice the amount of municipal solid waste generated in the same year.<sup>12</sup> With Alameda County's population growth over the past decade and expected increases in the coming years, addressing C&D waste is a pressing issue locally. This measure supports implementation of the California Green Building Standards Code (CALGreen) requirement that new construction projects must divert a minimum of 65 percent of the waste generated from the landfill.

In addition to C&D diversion, the County will look to grow the market for salvaged, reclaimed, and reused materials by exploring opportunities to incorporate such materials into new construction projects and improvement projects. An emerging idea to support the economic recovery of materials is to use buildings as material banks. We will explore this approach in our implementation strategy.

## Vision 2026 Alignment

These outcomes support the Vision 2026 10X goal of Accessible Infrastructure by reducing waste and incorporating green building principles and strategies in our built environment.

<sup>12</sup> "Construction and Demolition Debris: Material-Specific Data," U.S. EPA, updated December 3, 2022, <https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/construction-and-demolition-debris-material#:~:text=EPA%20estimated%20that%20600%20million,in%20the%20United%20States%2C%202015>.

## Equity Description

Successful implementation of this measure can reduce the need to extract virgin materials and manufacture new products, which often leads to damaging consequences for the surrounding (often frontline or BIPOC) communities and the environment. The application of the equity tool illuminated the need to focus on reuse and salvage of local materials to develop the regional circular economy, enhance local job creation opportunities, and avoid transportation-related greenhouse gas emissions. This resulted in a change to the measure to specify use of locally available salvaged materials.

## Community Engagement

Public input on SMM measures in the online feedback forum called on the County to shift toward upstream waste solutions, including in the C&D sector. One respondent pointed out that “unbuilding or deconstructing buildings (rather than demolishing them) leads to greater reuse and green job opportunities.” During public input of the draft plan, one respondent suggested the County “require deconstruction instead of demolition for whole buildings and major renovation projects to reduce embodied carbon impacts.” Since deconstruction might not be the right path for every major County project or building, we instead modified SMM 7a to include reuse of County building materials in local exchanges, expanding the scope of the submeasure and strengthening its impact. Establishing a programmatic shift toward reuse of building materials within our County operations will play a critical role in advancing toward zero waste and reductions of supply chain emissions that occur outside of the region.

## Metrics and Outcomes

This measure will be assessed based on whether submeasures are accomplished along with documentation of activities related to this work, such as creating case studies documenting the use of reclaimed building materials, greenhouse gas reduction impacts, and lessons learned.

# Transportation

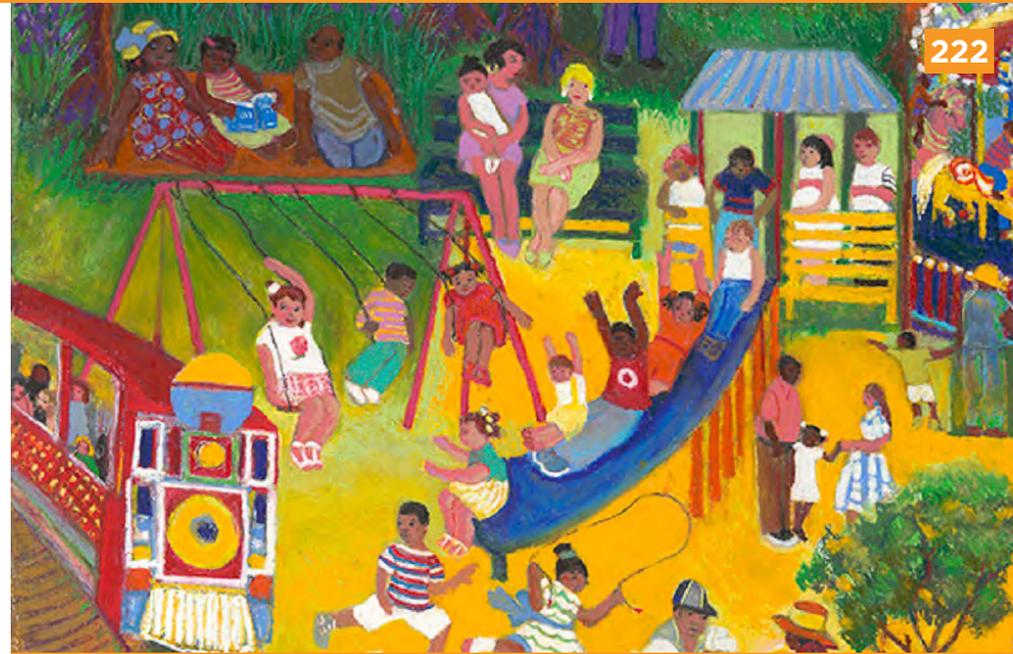
## MEASURES

### Green Fleet

- T 1: Fleet Transition
- T 2: Fleet Management
- T 3: Sustainable Fleet Practices
- T 4: Public Works Agency Fleet

### Employee Commutes

- T 5: Clean Commute Incentives
- T 6: Smart Parking Policies
- T 7: Shuttle and Bike Services
- T 8: Micromobility
- T 9: Transit Pass Program



This section covers how we will reduce greenhouse gas emissions

in the County's fleet operations and employee commutes.

## Section Introduction

### Description

The COVID-19 pandemic has dramatically shifted County operations, most notably through remote work and hybrid work schedules. With fewer County employees on-site, use of the County's transportation and fleet services has significantly decreased. Use of pool vehicles, County shuttles, parking spaces, and public transit has dropped substantially. In March 2021, the General Service Agency (GSA) Logistics team conducted an employee commute and telework survey to better understand how many employees were teleworking and how this affected County operations and the greenhouse gas emissions associated with employee commutes. The employee commute survey and other interagency outreach initiatives revealed that County employees strongly prefer to continue telework and hybrid work schedules; 92 percent of respondents to the commute survey expressed interest in regularly teleworking after social distancing mandates were lifted. If hybrid work schedules persist, the County's transportation programs will likely never reach pre-COVID use levels. It is crucial that the County consider this "new normal" when implementing our transportation programs by accurately reevaluating parking capacity needs, commute incentives, and funding allocation, and readjusting the scope and utilization of the County fleet.

Given the uncertainty of the global pandemic and new workplace norms, several of the measures in this section, especially those in the employee commute subsection,



are fluid and will be shaped by the kind of work norms the County establishes moving forward. Remote work initiatives are addressed in Measure 8 in the Climate Leadership and Governance section.

Even with uncertainty, it is important for the County to maintain ambitious goals for reducing our transportation-related emissions to remain in line with federal and state carbon neutrality goals. These ambitions are laid out in two subsections in this section: Green Fleet and Employee Commutes. The Green Fleet subsection focuses on transitioning the County fleet away from internal combustion engine (ICE) vehicles to electric vehicles (EVs) or other zero-emission vehicle (ZEV) alternatives, as well as organizational initiatives to support the transition. The last plan had measures related to greening the fleet, but the measures in this iteration will be more aggressive

to help pave the way for California's net neutrality goals and EV transition commitments. Efforts to electrify the County's fleet are in line with California SB 1010, Clean State Fleets, and set goals to prepare for California's sales ban on ICE vehicles by 2035. The Employee Commutes subsection covers programs that incentivize transportation alternatives to single-occupancy commutes in ICE vehicles. While electrifying single-occupancy vehicles is critical in reducing emissions, studies have shown that the use of public transportation produces significantly lower greenhouse gas emissions per passenger mile than private vehicles, even when taking life cycle emissions from construction of infrastructure into account.<sup>1</sup> Therefore, most commute-related measures proposed in this plan focus on supporting public transportation access and usage. Many of these programs are continuations and expansions of programs the last plan established. However, this GOCAP iteration alters and expands upon these measures with the COVID-19 pandemic in mind.

## Greenhouse Gas Reductions

As transportation-related emissions account for over half of the County's footprint, the potential for greenhouse gas reduction is significant. Successful implementation of the green fleet measures laid out in this plan could reduce the County's annual footprint by nearly 4,771 MTCO<sub>2</sub>e (metric tons of carbon dioxide equivalent), or 11 percent of total emissions. The greatest potential for emission reduction is through altering employee commute habits,



which accounted for 53 percent of the County's emissions in 2019, or 22,987 MTCO<sub>2</sub>e. With COVID-initiated remote work schedules, commuter-related emissions must have dropped drastically. Sustaining remote work and hybrid work schedules is a crucial strategy for the County to reduce our greenhouse gas footprint. Measure 8 in the Climate Leadership and Governance section discusses the potential for greenhouse gas reductions from remote work.

## Resilience Benefits Overview

One of the greatest concerns in transitioning to an EV fleet is an intensified dependency on an unreliable California power grid. Developing distributed energy resources (DER) systems that use local sources, such as renewable energy technologies, storage, and combined heat and

<sup>1</sup> "Public Transportation's Role in Responding to Climate Change, Updated January 2010," U.S. Department of Transportation, Federal Transit Administration, accessed November 8, 2022, <https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/PublicTransportationsRoleInRespondingToClimateChange2010.pdf>.

power, is vital to supporting a resilient EV expansion in the County. The Federal Office of Energy Efficiency and Renewable Energies states, “DERs can help agencies meet goals and mandates, deliver cost and energy savings, and provide environmental benefits.” These savings may allow for the incorporation of additional microgrid components that increase survival time during a grid outage when fuel supplies are limited.<sup>2</sup>

Although brownouts and blackouts make operating an EV fleet more difficult, EVs can provide grid resilience through bilateral charging. Bilateral charging is a process where the energy stored in EV batteries flows back into the building or grid (V2G). This allows EVs to operate as backup batteries to a building, maintaining essential functions, such as cooling, lights, and air filtration. A landmark United Kingdom pilot program begun in 2018 states that if 50 percent of the 11 million EVs expected to be on the road in the UK were V2G enabled, this would create 22 terawatt hours of flexible EV discharging capacity per year and could provide about 16 gigawatts of daily flexible capacity to the grid, reducing the risk of brownouts and blackouts. This technology can be used as a powerful tool of resilience and, by switching the fleet sooner rather than later, the County will have time to overcome unforeseen obstacles and gain flexibility to comply with shifting state and federal mandates.<sup>3</sup>



*The County-owned parking garage on 7th Street in Oakland features 18 electric vehicle charging ports available to the public during open hours.*

Through pursuing various pilot programs, the County can increase our climate resiliency in innovative ways. The County is currently pursuing a pilot project that will offer an off-grid portable solar EV charger and backup battery solution. Being entirely independent of the grid not only reduces the grid demand of EV charging, but the device can also provide on-demand backup energy to sites during brownouts and blackouts. Since the device is fully mobile, the County can allocate backup energy and charging services to locations with the greatest need during climate emergencies. If the pilot proves successful, enlisting these off-grid portable EV chargers at scale will greatly increase

<sup>2</sup> “Distributed Energy Resources for Resilience,” Federal Energy Management Program, accessed November 10, 2022, <https://www.energy.gov/eere/femp/distributed-energy-resources-resilience>.

<sup>3</sup> “Case Study (UK): Electric Vehicle-to-Grid (V2G) Charging,” Ofgem, Office of Gas and Electricity Markets, July 6, 2021, accessed November 10, 2022, <https://www.ofgem.gov.uk/publications/case-study-uk-electric-vehicle-grid-v2g-charging>.

the County's emergency response capabilities and bolster our climate resiliency.

Implementing and expanding the County's commuter programs can provide resilience to employees. For example, subsidizing public transit use and the Guaranteed Ride Home Program ensure County employees have a redundancy of transportation options to meet their travel needs in an emergency.

### Equity Overview

The County has been and remains committed to providing equitable access to our transportation services and programs. The County provides shuttles, carpool benefits, motor pool check-out, and other services to all employees, regardless of employment position or socioeconomic background. Throughout implementation of this plan, GSA Logistics will continue to equitably serve County employees and prioritize both internal and public-facing services to frontline communities, those most affected by climate impacts.

Low-income and disadvantaged BIPOC communities in high-use transportation corridors are [disproportionately affected](#) by vehicle emissions. Disparities in cardiovascular health outcomes between these communities and non-minority groups across the United States are [well established](#), with the African American population incurring the [highest overall death rate](#). This section aims to provide climate impact relief to these frontline communities through reducing fleet emissions and



prioritizing charging infrastructure near the communities.

As climate impact risks and unpredictable disruptions disproportionately affect disadvantaged communities, measures in this section seek to build a more accessible, integrated, and inclusive transportation network. The measures in this section not only mitigate unforeseen climate-related event impacts but give the County a resilient foundation for protection and recovery.

### Vision 2026 Alignment

Measures in the section addressing the County's environmental impact from transportation-related activities particularly pertain to three of the 10X goals: Healthcare for All, Employment for All, and Accessible Infrastructure. The proposed measures also directly support the vision elements of Healthy Environment, Safe and Livable

Communities, and Thriving and Resilient Population by offering residents cleaner air and better modes of transport.

From transitioning County vehicles to achieve a net-zero fleet to pursuing better fleet procurement and monitoring practices, the electrification efforts are indispensable for ensuring a healthy environment for all Alameda County residents. Black carbon, an air pollutant from combusting diesel, can cause asthma and cardiovascular diseases. In the American Lung Association's annual State of the Air report, Alameda County received the lowest score possible, reporting nearly 153,000 people with asthma.<sup>4</sup> Reducing black carbon and other particulate matter tailpipe emissions from vehicles can directly improve the health of Alameda County residents.

Above all, the transportation measures speak directly to the Accessible Infrastructure vision in all its goals, from developing infrastructure for sustainable mobility options and advocating best practices in fleet management and safety, to optimizing the use of existing facilities and promoting smart transportation systems. The collective measures in the Transportation section advance the County's vision of a cleaner, safer, and more accessible mobility infrastructure.

## Monitoring and Reporting

Gauging success for actions that advance the green fleet



is directly measurable by how many EVs we procure year to year. Displaying this metric online and sending out quarterly reports to County employees will record how far each department has come in its EV transition. Additionally, the County can report annually how many metric tons of CO<sub>2</sub>e we avoid by using the growing number of EVs in our fleet. Reporting the success of the County's commuter programs will largely depend on how many employees remain teleworking full time or adopt hybrid work schedules. However, the participation of the commuter programs can still be monitored through data collected from the annual commuter survey and from parking spot allocations.

<sup>4</sup> "Report Card: California," American Lung Association, State of the Air 2022, accessed November 18, 2022, <https://www.lung.org/research/sota/city-rankings/states/california>.

# Measures

## Green Fleet

### T 1: Fleet Transition

Develop an electrification plan, in line with the state’s 2035 zero emission vehicle (ZEV) mandate, outlining infrastructure, budget, and behavioral strategies necessary to achieve a net-zero fleet by 2045.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
a. Transition 45 percent of the motor pool fleet to ZEVs by 2026 and 100 percent by 2031.	GSA-Logistics	GHG:  County Operations	Capital: Current  +    Personnel:     Existing	  Flexible Services Natural Resources Protection
b. Transition 15 percent of non-pursuit light-duty and off-road vehicles to ZEVs by 2026 and 100 percent by 2040.	GSA-Logistics	GHG:  County Operations	Capital: Current  +    Personnel:     Existing	   Flexible Services Health and Safety Natural Resources Protection

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>c. Transition 17 percent of all medium- and heavy-duty vehicles to ZEVs by 2026 and 100 percent by 2045.</p>	<p><b>GSA-Logistics</b></p>	<p>GHG:</p>  <p>County Operations</p>	<p>Capital:</p> <p>Current</p>  <p>Personnel:</p>  <p>Existing</p>	 <p>Flexible Services Health and Safety Natural Resources Protection</p>
<p>d. Develop charging infrastructure to meet the growing demand of fleet EVs, prioritizing expansion in highway transportation corridors.</p>	<p><b>GSA-Logistics</b></p>	<p>GHG:</p>  <p>County Operations</p>	<p>Capital:</p> <p>Current</p>  <p>Personnel:</p>  <p>Existing</p>	 <p>Flexible Services Frontline Community Benefits Health and Safety</p>
<p>e. Establish a fleet procurement hierarchy, prioritizing ZEV procurement whenever possible and hybrid vehicles if current ZEVs on the market do not meet operational needs, and consider ICE vehicles only in highly specialized cases.</p>	<p><b>GSA-Logistics</b></p>	<p>GHG:</p>  <p>County Operations</p>	<p>Capital:</p> <p>Current</p>  <p>Personnel:</p>  <p>Existing</p>	 <p>Flexible Services Natural Resources Protection Return on Investment</p>

## Background and Description

In accordance with California’s goal to replace internal combustion engine (ICE) vehicles with ZEVs and Governor Newsom’s Executive Order N-79-20 mandating all new passenger vehicle sales be ZEV by 2035, the County has developed a fleet electrification plan outlining infrastructure, budget, and behavioral strategies to achieve a net-zero fleet by 2045. The County’s fleet accounts for 11 percent of our emissions, with 5 percent of fleet emissions coming from medium- and heavy-duty vehicles, and 95 percent coming from light-duty vehicles. Fleet electrification not only reduces the County’s greenhouse gas emissions but also provides economic benefits, including lowering the life cycle cost of County vehicles and reducing exposure to increasingly volatile fuel prices. The [U.S. Department of Energy, Office of Scientific and Technical Information](#) states, “higher pack-to-wheel efficiency and the lower energy cost per mile, as well as the

lower expense for maintenance and repair, translate to operating savings over conventional vehicles.” This, in turn, leads to the projection that EVs with battery ranges over 200 miles will see complete cost recovery in under five years. Moreover, when including the numerous federal and state EV rebate programs, this cost recovery period is even shorter.

Furthermore, deployment of a greener fleet benefits local communities through less polluted air and a better living environment. Reducing local particulate matter from diesel emissions is crucial for creating more livable communities. The County’s medium- and heavy-duty fleets have been running on renewable diesel, or R99, for the past decade. Although the life cycle carbon emissions from renewable diesel are far less than those of conventional diesel, renewable diesel still emits particulate matter harming frontline communities. The U.S. Environmental Protection Agency (EPA) notes that [black carbon](#), an air pollutant from the incomplete combustion of diesel, causes asthma and cardiovascular diseases. In the American Lung Association’s annual State of the Air report, Alameda County received the lowest score possible, reporting nearly 155,000 people with asthma. Reducing the County’s black carbon emissions is in line with SB 1383, California’s Short-Lived Climate Pollutant Reduction regulations, which sets a statewide goal of reducing black carbon emissions by 50 percent from 2013 levels by 2030.

Adopting a fleet procurement hierarchy is critical for achieving the fleet transition goals. The County will prioritize procurement of a ZEV anytime we replace or add a fleet vehicle. A hybrid solution will be considered only if there is no current ZEV on the market that can meet the operational needs of a particular fleet vehicle. Only in extremely specialized cases will the County consider procurement of an ICE vehicle such as pursuit-related vehicles.

In the last decade, the County has installed 111 EV ports with 79 available to the public. In this same time frame, the County has acquired 74 more ZEVs and 12 more hybrids, the majority of which are non-pursuit light-duty vehicles. Great potential remains for transitioning the medium- and heavy-duty fleet portion to ZEVs. In 2019 alone, the County avoided 184 MTCO<sub>2</sub>e using EVs. The County’s fleet is already 21 percent green, with 197 hybrids and 81 EVs. Striving for the ambitious EV fleet goals in this measure will keep Alameda County at the forefront of sustainable public fleet management.



## Vision 2026 Alignment

Transitioning the County's fleet will reduce our emissions and adverse environmental impact on local communities, expand EV charging infrastructure for County and public use, and achieve interdepartmental access to EVs and County fleet services. These outcomes align with two of the County's 10X goals, Healthcare for All and Accessible Infrastructure, as well as vision elements of Healthy Environment and Safe and Livable Communities for all county residents.

## Equity Description

The County will deploy EV infrastructure whenever possible in or near low-opportunity neighborhoods, improving access to publicly available County charging station hubs. As BIPOC communities are disproportionately affected by brownouts and blackouts, bilateral charging options at potential County resilience hubs can provide redundancy to the grid to mitigate the increased demand and load that an electrified fleet imposes. Additionally, BIPOC communities frequently suffer from poor air quality due to vehicle particulate matter emissions in high traffic areas.<sup>5</sup> Therefore, transitioning the County to clean ZEVs will improve air quality in these marginalized communities. After applying the equity tool, additional equity considerations were added to the measure write-up, but the language of the measure itself did not change.

## Community Engagement

Sixty-six percent of the public survey respondents considered adopting low-emission electric County fleet cars and trucks one of the most valuable strategies to reduce operational greenhouse gases and prepare for climate impact. In addition, the public survey also recorded various anecdotal statements of the public's vision for an electrified County fleet, with one respondent stating, "limit use of fossil-fueled vehicles; more carpooling of crews/teams instead of individual cars and trucks parading around." Participants in the second community workshop also emphasized the importance of the County's considering the needs of vulnerable, frontline, and at-risk populations and communities, which could involve prioritizing the shift to electric vehicles in transportation corridors with more air pollution. Responses from the door-to-door survey reflected a similar sentiment, with 86 percent of respondents rating improving air and water quality as a somewhat important or very important additional benefit of climate action.

According to the employee commute survey, approximately 9 percent of respondents are currently using EVs, while 43 percent expressed interest in EV ownership. Approximately 40 percent of respondents did not have any concerns using an EV for business travel. In the employee climate survey, 33 percent of respondents selected adding more EVs to the fleet as a one of their top two ways to reduce the environmental impact from driving on the job. Besides the great emission-reduction potential, transitioning the County's currently gas- and hybrid-dominated motor pool fleet profile to a zero-emission one would also benefit employees interested in using EVs, improving accessibility to clean commute options, and accelerating the pace of the green transportation evolution.

---

<sup>5</sup> Palmer, "Access to Electric Vehicles Is an Environmental Justice Issue."

## Metrics and Outcomes

Using existing systems and databases, each department’s current vehicle usage will be actively monitored to determine the most effective strategy for ZEV replacement procurement and management (e.g., idle time, distance traveled, areas visited, fuel consumed, utilization). The status and progress of ZEV transition and fleet utilization will be shared via annual or quarterly reports, as well as on the County’s website, which will include a live tracker showing the progress of the ZEV transition and associated emission reduction. The recorded metrics for this measure will improve with the expansion of remote monitoring technology in T 2c.

## T 2: Fleet Management

**Update fleet procurement and management policy with best practices, including state and regional priorities, supporting an equitable transition to a carbon-neutral fleet.**

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
a. Create a cross-agency Sustainable Transportation Panel, as established in municipal code 3.32.200, to develop purchasing standards, review agency/departmental vehicle usage, implement the electrification plan described in T 1, and introduce initiatives to minimize the County’s environmental impact from transportation.	<b>GSA-Logistics</b>	GHG:  County Operations  Resilience:  County Operations	Capital: Current  +   Personnel:   Existing	  <b>Flexible Services</b> <b>Return on Investment</b>
b. Replace vehicles at the end of their service life with a zero emission vehicle (ZEV) provided that the ZEV alternative is a compatible replacement rightsized to perform the work duties currently demanded of the County vehicle.	<b>GSA-Logistics</b>	—	Capital: Current  +    Personnel:   Existing	—

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>c. Expand remote monitoring technology, such as Geotab, ChargePoint, and GPS Insight, to all assets to collect telematic data, such as idling, usage, and driving safety.</p>	<p><b>GSA-Logistics</b></p>	<p>—</p>	<p>Capital: Current   + </p> <p>Personnel:                        Existing</p>	 <p><b>Flexible Services</b> <b>Health and Safety</b></p>
<p>d. Fill the Sustainable Transportation manager role to facilitate implementing the goals outlined in these measures.</p>	<p><b>GSA-Logistics</b></p>	<p>—</p>	<p>Capital: Current   + </p> <p>Personnel:                        Existing</p>	 <p><b>Community Prosperity</b></p>
<p>e. Advocate for funds to offer a second fellowship position with GSA Logistics, increasing learning and collaboration opportunities for emerging sustainability professionals.</p>	<p><b>GSA-Logistics</b></p>	<p>—</p>	<p>Capital: Current   + </p> <p>Personnel:  </p>	 <p><b>Community Prosperity</b></p>

### Background and Description

Transitioning the fleet to majority EVs is one of the most ambitious goals laid out in this plan. This measure and supporting submeasures aim to improve the effectiveness and transitional speed of EV fleet implementation and safeguard against any challenges associated with a large-scale EV fleet transition.

The best tool the County can employ to support our EV transition is to create a cross-agency Sustainable Transportation Panel. The panel was written into the municipal code to optimize County transportation functions; it must have representatives from various agencies, including a Logistics Services manager, Sustainable Transportation manager, Motor Vehicle manager, Office of Sustainability manager, Procurement member, Public Works fleet manager, Human Resources representative, and members from three to four other County

agencies. Along with supporting the County's EV fleet transition, the panel will provide many other transportation services, including fleet rightsizing, collecting and monitoring commuter analytics, and actively promoting commute alternatives. For more information on the panel's framework and responsibilities, please reference Alameda County municipal code 3.32.200.

Currently, 35 percent of GSA's fleet has remote monitoring technology through GPS Insight. GSA Logistics will work to expand this monitoring technology to enable more comprehensive utilization analytics. Having most County vehicles in one database is critical to ensure informed decision-making for fleet management, a central role of the Sustainable Transportation Panel.

The Sustainable Transportation manager is currently an unfilled position in GSA Logistics. Filling it is vital to ensure proper implementation of the measures outlined in this plan.

Finally, GSA Logistics could return to hosting a second Climate Corps fellowship position, enabling fellows to contribute to both fleet and clean commute projects. GSA Logistics successfully hosted two fellows from 2015 to 2019.

## Vision 2026 Alignment

As previously stated, the intention of this measure is to support an equitable transition to EVs and expand sustainable transportation programs. This measure supports the Accessible Infrastructure 10X goal. Additionally, because of the submeasures associated with hiring for new positions, the measure supports the Employment for All 10X goal.

## Equity Description

Implementing the Sustainable Transportation Panel is the most effective way the County can ensure equity in our transportation programs. Panel representatives from multiple County agencies could discuss safeguards for employee and community interests across the county. The panel could support equitable expansion of the EV fleet, charging infrastructure, and commute programs.

The County prioritizes equitable access to the sustainable transportation and fellowship positions. As an equal opportunity employer, the County fills positions without discrimination based on race, religion, color, national origin, gender identity, sexual orientation, pregnancy, age, marital status, veteran status, or disability status.



After applying the equity tool, additional equity considerations were added to the measure write-up, but the language of the measure itself did not change.

### Community Engagement

Various employee feedback mechanisms have shown that employees are excited about the County’s EV transition and believe the County should lead by example with sustainable transportation practices. Many thought the development of the panel was the best way to support a sustainable fleet. Some, however, expressed concerns about challenges associated with an EV transition, such as scaling charging infrastructure, charging times, and range restrictions. These concerns are well warranted and further demonstrate the necessity of the Sustainable Transportation Panel to adequately address them.

### Metrics and Outcomes

The priority outcome of this measure is the creation of the cross-agency Sustainable Transportation Panel. Operational success for the panel will be an ongoing agenda as it pursues transportation goals and programs. However, near-term success will appear in the creation of the panel itself in accurate alignment with County municipal code. Additionally, for this measure, success can directly be quantified through the percentage of the fleet accounted for on the GPS Insight database.

## T 3: Sustainable Fleet Practices

**Continue to improve fleet efficiency and management.**

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
a. Shift agency fleet dependency on individually assigned vehicles to common-use pool vehicles, optimizing fleet utilization and reducing operational costs and emissions.	<b>GSA-Logistics</b>	GHG:  <b>County Operations</b>	Capital: Current  + Personnel:  <b>Existing</b>	 <b>Flexible Services</b> <b>Return on Investment</b>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
b. Implement operational and maintenance best practices, such as recycled antifreeze, bulk purchasing, low-VOC materials, and continued training on electric vehicle maintenance.	<b>GSA-Logistics</b>	—	Capital: Current  Personnel:  Existing	 <b>Flexible Services</b>
c. Research new technologies for potential pilot projects, such as bilateral charging, hydrogen vehicles, and off-grid solar charging solutions.	<b>GSA-Logistics</b>	GHG:  <b>County Operations</b>	Capital: Current  Personnel:  Existing	 <b>Flexible Services</b> <b>Health and Safety</b>

## Background and Description

Fleet utilization reports provide annual information about the fleet, showing its adherence to policies and codes. Vehicles at each agency should be regularly evaluated with the County’s utilization baseline to prevent wasted spending and optimize resource allocation. If a vehicle does not meet the minimum requirements, it should be re-assigned, salvaged, or sold, unless the agency can make an exceptional case for the underused vehicle.

The most effective solution for vehicle underuse is transitioning the fleet from a majority of individual agency-assigned vehicles to shared pool vehicles. Currently, County pool vehicles are widely underused, and the pool has the capacity to meet more demand from agencies switching over. By transitioning to a fleet majority of shared pooled vehicles, the County will require fewer overall vehicles, thus reducing operational and infrastructure costs and minimizing supply chain emissions by requiring fewer vehicle orders. Case studies from other county fleets have shown 90 percent cost savings per trip taken with a pool vehicle, amounting to an annual saving of \$4,000 per vehicle eliminated from the fleet.<sup>6</sup> The cheapest and most sustainable vehicle in the fleet is the one the County does not have to buy. In some cases, the County must maintain select agency-specific assigned vehicles to meet unique performance requirements, such as police-rated

<sup>6</sup> “How Fleet Services Deliver Savings in a Remote Working World,” *The Agile Fleet*, June 6, 2022, accessed November 28, 2022, <https://blog.agilefleet.com/fleet-services>.

pursuit vehicles. The Sustainable Transportation Panel, described in T 2, can optimize vehicle utilization assessments, determining where the County can save the most resources through pool vehicle use and where operations are optimally positioned for the transition.

Researching and running pilot projects is a great way for the County to lead by example. The County is currently pursuing a pilot project that will offer an off-grid portable solar EV charger and backup battery solution. Being entirely independent of the grid, the solar device will not only reduce the grid demand of EV charging but also can provide on-demand backup energy to sites during brownouts and blackouts. Since the device is fully mobile, the County can allocate back-up energy and charging services to locations with the greatest need during climate emergencies. If the pilot project proves successful, enlisting these off-grid portable EV chargers at scale will greatly increase the County's emergency response capabilities and bolster our climate resiliency.

### **Vision 2026 Alignment**

This measure focuses on optimizing fleet operations throughout the County. Promoting optimized resource allocation in the County fleet aligns with the Accessible Infrastructure 10X goal.

### **Equity Description**

Optimizing fleet resource allocation promotes equitable access to fleet services and supports an equitable transition to an EV fleet. When the County expands the motor pool fleet, additional hubs ideally will reside in or near low-income or disadvantaged communities. Although motor pool vehicles are accessible only to employees, positioning the hubs in disadvantaged communities supports EV charging infrastructure development in those areas. Additionally, running a bilateral charging pilot program at community-facing facilities advances the County toward providing climate resilience centers or hubs in equitably accessible, trusted environments. After applying the equity tool, additional equity considerations were added to the measure write-up, but the language of the measure itself did not change.



*The EV Arc system is a portable system that can provide on-demand charging and back-up energy during a climate emergency.*

## Community Engagement

According to the public survey and the first community workshop, the public recognizes efficient fleet and parking management as significant opportunities to address climate change, such as downsizing parking lots, incentivizing carpooling, and making alternative commutes more accessible. In the public survey, 65 percent of respondents rated resilient County services that continue to operate during climate impacts as “very important,” further emphasizing the importance of portable off-grid charging solutions.

Various employee feedback mechanisms show that employees are excited about the County’s EV transition and feel the County should lead by example with sustainable transportation practices. Some, however, expressed concerns for challenges associated with an EV transition, such as scaling charging infrastructure, charging times, and range restrictions. These concerns are well warranted and further demonstrate the necessity of the Sustainable Transportation Panel described in T 2 to adequately address them.

## Metrics and Outcomes

Success for this measure can be quantified through the annual utilization report, which tracks vehicles’ monthly miles traveled, hours used, and days per month used. Additionally, GSA Logistics can follow how many transportation pilot projects the County runs, and how many turn into operational norms.



## T 4: Public Works Agency Fleet

Identify attainable emission-reduction potential in fleet operations at the Public Works Agency (PWA).

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Research and identify low-emission technology that adequately supports the highly specialized services of PWA vehicles and equipment. Implement as feasible.</p>	<p><b>GSA-Logistics</b> PWA</p>	<p>GHG:  County Operations</p>	<p>Capital: Current  +   </p> <p>Personnel:     Existing</p>	<p> <b>Health and Safety</b> <b>Natural Resources Protection</b></p>

### Background and Description

In 2019, the County’s fleet emitted 4,664 MTCO<sub>2</sub>e, 30 percent of which came from PWA. Due to its highly specialized fleet, PWA is not included in the main fleet transition goals laid out in T 1. However, it is still critical for GSA Logistics and PWA to work together to reduce PWA’s fleet emissions wherever possible. Half of PWA’s fleet consists of medium- or heavy-duty vehicles running on renewable diesel. Although renewable diesel has a smaller carbon footprint, it still releases black carbon, a harmful particulate matter. Reducing local black carbon emissions from diesel combustion is crucial for creating more livable communities.

### Vision 2026 Alignment

This measure aligns with the Safe and Livable Communities and Healthcare for All vision elements, and the Accessible Infrastructure 10X goal. PWA maintains public roads and amenities. Therefore, reducing PWA’s fleet emissions without compromising operational functions ensures the public’s sustained access to public amenities. In addition, reducing black carbon emissions, a pollutant directly linked to asthma and cardiovascular disease, supports health-related vision elements and goals.

## Equity Description

Low-income disadvantaged communities are often near freeways and industrial areas, and therefore get the brunt of vehicle emissions.<sup>7</sup> Because prolonged exposure to the particulate matter from vehicle emissions harms human health, reducing local particulate matter emissions helps these communities. After running the racial equity tool, equity considerations were added to the measure, but the language itself did not change.

## Community Engagement

According to the public survey, an electrified County fleet is a recurring theme in the public's visions for the community in 10 years. More specifically, 65 percent of the respondents in the public survey considered the County's adoption of a low-emission, electric fleet of cars and trucks one of the most valuable strategies to reduce operational greenhouse gases and prepare for climate impacts. Participants in the second community workshop also emphasized the importance of the County considering vulnerable, frontline, and at-risk populations and communities by prioritizing the shift to electric vehicles in locations that experience more air pollution. The County has a great opportunity to center equity in our fleet transition. This could include prioritizing the transition of medium- and heavy-duty fleet vehicles, as they emit the most black carbon, which historically has caused adverse health outcomes in vulnerable communities. Responses from the door-to-door survey reflected a similar sentiment, with 86 percent of respondents rating improving air and water quality as a somewhat important or very important additional benefit of climate action.

## Metrics and Outcomes

Gauging the success of this measure will be an ongoing process. With such an open-ended goal, the best way to promote progress is to ensure steady collaboration and communication between GSA Logistics and PWA. The creation of the Sustainable Transportation Panel described in T 2 can streamline this communication process and promote faster and more substantial emission reductions at PWA.



<sup>7</sup> Neha Palmer, "Access to Electric Vehicles Is an Environmental Justice Issue," *Scientific American*, November 2, 2021, accessed November 8, 2022, <https://www.scientificamerican.com/article/access-to-electric-vehicles-is-an-environmental-justice-issue>.

## Employee Commutes

### T 5: Clean Commute Incentives

**Advocate for direct monetary incentives for non-single-occupancy vehicle commutes, centering equity while expanding commute options for employees.**

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
a. Determine the feasibility of implementing a cash-per-day incentive for employees to walk, bike, or carpool to work.	<b>GSA-Logistics</b>	GHG:  County Operations	Capital: Current  +  Personnel: 	 <b>Community Prosperity</b> <b>Flexible Services</b>
b. Determine the feasibility of implementing a cash-per-month incentive to cover the costs of commuting via public transportation, vanpools, or paratransit.	<b>GSA-Logistics</b>	GHG:  County Operations	Capital: Current  +  Personnel: 	 <b>Community Prosperity</b> <b>Flexible Services</b>

### Background and Description

A direct monetary subsidy for using alternative commute methods will greatly motivate employees to try alternatives to driving alone and significantly reduce the County’s greatest greenhouse gas footprint.<sup>8</sup> Through a selective application process, the County can prioritize both cash-per-day and cash-per-month funding to employees who reside in low-income, disadvantaged communities. This helps reduce start-up costs while promoting equitable access for the program. Funding for this program can be sourced through efforts such as those described in T 6.

<sup>8</sup> “Public Transportation’s Role in Responding to Climate Change, Updated January 2010,” U.S. Department of Transportation, Federal Transit Administration, accessed November 8, 2022, <https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/PublicTransportationsRoleInRespondingToClimateChange2010.pdf>.

Pre-COVID, the County's greatest emission source was employee commutes, as most employees drove alone to work in an internal combustion engine (ICE) vehicle. Although the landscape of where and how we work is ever-changing with remote work and hybrid work schedules, the County still needs to implement emission reduction strategies for employees who regularly commute and to prepare for a potential surge of more employees returning from remote work.

According to the 2021 employee commute survey, of the employees who did not telework, 76 percent of them drove to work alone. Employees who teleworked said that if they were to come back to the office, they would be even more likely to drive alone, making it vital to incentivize alternate commute behavior.

### Vision 2026 Alignment

Developing a commuter incentive program of this nature is in line with the Accessible Infrastructure 10X goal, as it supports equitable access to all commuter modes used in the County, reinforcing the Thriving and Resilient Population vision element.

### Equity Description

In 2019, the GSA Logistics team developed a web-based map with ArcGIS to visualize from which locations and to which facilities County employees commute. Using ArcGIS to integrate this map with the California Air Resources Board's (CARB's) [California Climate Investments priority populations map](#), the County can prioritize clean commute incentives for employees commuting from low-income and disadvantaged communities. Reviewing the measure with the equity tool inspired the use of this map for equitable implementation.

### Community Engagement

In the employee commute survey, employees were asked what would encourage them to use modes of transit other than driving alone. Thirty percent of the respondents said that a \$25 Clipper Card credit per pay period would encourage to try alternatives to commuting alone in their cars. A cash-per-month incentive described in this measure responds to this demonstrated demand from employees.



In the public survey, respondents expressed strong support for alternative commute incentives, including carpool, public transit, and bikes, as well as buildout of the required infrastructure and facilities planning to ensure safety and practicality. Additionally, participants in the first community workshop expressed strong interest in more bike infrastructure, including a fleet of bicycles for County employees. In the second community workshop, County facilitators and community members discussed that, while the County cannot give direct financial incentives to employees to purchase EVs or bikes, it can incentivize them by making these modes of transit the most convenient options. Furthermore, several participants in the employee climate survey wrote in comments to support public transit commute incentives.

In the online feedback forum, public participants rated alternative commute incentives for County employees the highest priority level, at 80 percent, noting that incentives are an effective way to encourage clean commuting and reduce County emissions.

### Metrics and Outcomes

A decrease in single-occupancy commutes and a surge in alternative commutes, such as carpooling, vanpooling, public transit, and active transit, would show successful implementation of this measure. The annual commute survey distributed by GSA Logistics can document the yearly shift in commuter modes and give a snapshot of the program’s effectiveness.

## T 6: Smart Parking Policies

**Determine the feasibility of additional parking policies designed to disincentivize single-occupancy commutes in internal combustion engine (ICE) vehicles.**

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
a. Advance initiatives for parking policies that neutralize the cost of parking operations and use reallocated resources, such as the incentives described in T 5, to subsidize Clean Commute programs.	<b>GSA-Logistics</b>	GHG:  <b>County Operations</b>	Capital: Current  +  Personnel:     <b>Existing</b>	 <b>Flexible Services</b>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
b. Designate an increasing amount of parking throughout the County for carpools, low-emission vehicles (LEV), or zero-emission vehicles (ZEV) only.	<b>GSA-Logistics</b>	GHG:  County Operations	Capital: Current  +  Personnel: 	 <b>Flexible Services</b>
c. Reengage the parking buy-back program if and when County facilities return to significant in-person work to increase land-use efficiency and encourage clean commuting.	<b>GSA-Logistics</b>	GHG:  County Operations	Capital: Current  +  Personnel: 	 <b>Flexible Services</b>

### Background and Description

One way to encourage clean commute options is by changing our parking policies to be more equitable for all County employees and support our Clean Commute programs. Currently, employees parking at facilities in Hayward and Oakland pay for parking, while in San Leandro and Dublin, parking is free. It is in the County’s best interest to charge employees and the public for parking in all these areas and to increase the parking price, so parking does not operate at a deficit. With cost-neutral parking operations, the County can divert the excess funding to the Clean Commute program and disincentivize single-occupancy ICE commutes while further incentivizing carpooling, public transit, and other active transit alternatives.

According to the Department of Energy, Office of Scientific and Technical Information’s Greenhouse Gas Toolkit, found in the Urban Land Institutes’ [Moving Cooler report](#), the pairing of enhanced alternatives and parking pricing management could result in a 0.8 percent to 1.8 percent reduction in total transportation sector baseline vehicle miles traveled (VMT) in 2030, depending on the pricing. An example of alternative enhancement is the smart parking system used by BART stations in San Francisco, which allows drivers to reserve parking spaces. Surveys showed that this enhancement alone led to a sizable increase in public transit commutes (5.5 more per month), a decrease in average commute time (an average of 5 percent for a 50-minute commute), and a reduction in total VMT per participant of 9.7 miles per month.

## Vision 2026 Alignment

This measure directly supports the Accessible Infrastructure 10X goal by effectively advancing sustainable mobility efforts, efficiently optimizing utilization and maintenance of existing parking infrastructure, and promoting smart and adaptive systems for a more transparent and resilient transportation system that is crucial to the vision element of a Thriving and Resilient Population.

## Equity Description

When implementing parking cost, the County must consider both our own financial impact and that of employees. One current consideration is that employees' work location greatly determines if they pay for parking at all. With a Countywide parking policy, the County's parking operational costs would fall more equitably on all employees using parking and not solely on a geographically selected group of employees. Additionally, by operating parking at a neutral cost, the County can reallocate current parking expenditures to subsidize equitable commuter incentives like those described in T 5. After applying the equity tool, additional equity considerations were added to the measure write-up, but the language of the measure itself did not change.

## Community Engagement

In the employee commute survey, many employees emphasized a desire for more carpool/vanpool parking, parking reimbursements, and subsidies. In community engagement workshops, participants thought a Countywide parking policy was a "fair" parking system. On the online feedback forum, respondents rated alternate parking policies as a "moderate" priority. This being said, according to the public survey, 54 percent of respondents thought Alameda County's emission reduction goals should be more ambitious than those of other Bay Area local governments.

## Metrics and Outcomes

The ideal outcome for this measure is the County's parking operations no longer operating at a deficit. The County can also showcase our support of clean commute alternatives through reporting the new funding directed to commuter programs as a result of parking policy reform. GSA Logistics staff will consider the percentage increase of designated carpool and EV parking spaces throughout the County.



## T 7: Shuttle and Bike Services

Support and expand the Clean Commute shuttle and bike service.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Investigate potential employee commuter hub areas to expand the County shuttle program focusing on first- and last-mile services.</p>	<p><b>GSA-Logistics</b></p>	<p>GHG:    <b>County Operations</b></p> <p>Resilience:    <b>Community County Operations</b></p>	<p>Capital:  <b>Current</b>  </p> <p>Personnel:    <b>Existing</b></p>	 <b>Flexible Services</b>
<p>b. Determine if expanding the shuttle program to new County facilities is justified based on potential commuter usage.</p>	<p><b>GSA-Logistics</b></p>	<p>GHG:    <b>County Operations</b></p> <p>Resilience:    <b>Community County Operations</b></p>	<p>Capital:  <b>Current</b>  </p> <p>Personnel:    <b>Existing</b></p>	 <b>Flexible Services</b>
<p>c. Reach out to County facilities likely to participate in the bike program and facilitate their entry into the program.</p>	<p><b>GSA-Logistics</b></p>	<p>GHG:    <b>County Operations</b></p>	<p>Capital:  <b>Current</b>  </p> <p>Personnel:    <b>Existing</b></p>	 <b>Flexible Services</b>

## Background and Description

The shuttle and bike programs have promoted commute alternatives for the past decade. The shuttle provides free first- and last-mile transit to both the public and County employees, taking riders from selected BART stations to various County facilities and back. Since the first shuttle installation in 2009, four more routes have been added, with most of them accessible to the public. According to 2013 data, the shuttle transported 163,000 riders per year. Although ridership has been down due to COVID-19, maintaining the shuttle service for employees and members of the public returning to work is essential. When new County facilities are developed or old ones relocated, GSA Logistics will work with the expanding County agency(s) to determine whether it is reasonable to add additional shuttle routes to the area. GSA Logistics will survey employees to find out how they will commute to the site. If enough employees use BART and public transit, GSA Logistics will recommend a new shuttle service and identify the expansion cost for the relevant department(s). GSA will also analyze shuttle routes to optimize services during primary commute hours.



GSA Logistics services will analyze optimal placement and facilitate the acquisition and deployment of additional bike lockers to County facilities specified by employees in the annual Clean Commute survey. Recent theft of County bikes has raised security and liability concerns for County-owned bikes offered in the bike-share program. Expansion of County-offered bikes or active transit vehicles, such as e-bikes and e-scooters, will be explored with the potential for theft in mind, with possible additional security measures.

## Vision 2026 Alignment

Expanding the current shuttle and bike programs supports the Accessible Infrastructure 10X goal by providing and supporting diverse commute options for County employees across the county, promoting the vision element of Safe and Livable Communities.

## Equity Description

While the overarching intention of this measure is to expand the County's shuttle and bike services to employees and the public, it is important to consider the safety of some employee groups who need certain shuttle routes to be private due to the nature of their work.

Further development of shuttle and bike services that increase equitable accessibility to the public should be centered around participant safety and security. When considering expanding the shuttle service, GSA Logistics will use CARB's [California Climate Investment priority population map](#) to prioritize expansion to underserved communities. After running the racial equity tool, equity considerations were added to the measure, but the language itself did not change.

## Community Engagement

In the employee commute survey, approximately 8 percent of respondents wanted to see increased shuttle service. An additional 8 percent wanted to see more biking incentives, such as bike lockers at County facilities and subsidies for bike maintenance. In the public survey, the synergistic potential of the combined usage of shuttles and bikes was highlighted given the longer distances that bikes and e-bikes can cover than walking. As the participants in the first community survey noted, the Guaranteed Ride Home Program crucially supplements the development of bike and public transit to give employees peace of mind in choosing cleaner commute options, knowing they can always make it home in an emergency. Lastly, participants in the second community workshop pointed out that they were unaware that four of the five shuttle lines are open to the public at no cost. The County should therefore increase outreach and public awareness of the shuttle service to increase ridership.

## Metrics and Outcomes

The measure's success can be gauged by the annual ridership of the shuttle program and the expansion level of the associated first- and last-mile services. The bike program's success will be gauged by how many more agencies request bike lockers or bike-share services and how many more employees bike to work or use bikes for business travel.

## T 8: Micromobility

Explore micromobility options for work-related business travel, including e-mobility.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
a. Provide informational and infrastructural support to encourage active travel among employees.	GSA-Logistics	—	Capital: Current  +  Personnel:     Existing	 Flexible Services
b. Determine the cost feasibility and liability to pilot e-bikes and e-scooters for work-related purposes.	GSA-Logistics	GHG:  County Operations	Capital: Current  +  Personnel:     Existing	 Flexible Services

### Background and Description

Micromobility from small lightweight vehicles such as bicycles and scooters provides more options for business travel. Electric-powered devices such as e-bikes and e-scooters expand range and make such vehicles accessible to more users.

The County currently has an inventory of hard-copy maps of the best biking routes between County facilities. GSA Logistics will work to digitize these biking route maps for easy online access by all County employees.

Increasing theft of County bikes has raised security and liability concerns. Expansion of County-offered bikes or active travel vehicles, such as e-bikes and e-scooters, will be explored with the potential for theft in mind, and any addition to the program will have adequate security measures.

Historically, GSA Logistics has organized an annual event to promote the region's Bike to Work Day. GSA Logistics will continue to assess interest in Bike to Work Day through the annual commuter survey and organize associated events if employees are interested.

## Vision 2026 Alignment

Piloting micromobility programs with e-bikes and e-scooters is in line with the Accessible Infrastructure 10X goal, which not only supports various modes of mobility but paves the way for a more resilient, active, and advanced transportation system, accelerating the vision element of Safe and Livable Communities.

## Equity Description

Supporting micromobility solutions in low-income and disadvantaged communities is crucial, as residents in these areas are less likely to own cars or have access to active transit options. When considering the advancement of micromobility options, the County will prioritize expansion into low-income and disadvantaged areas as identified by CARB's [California Climate Investments priority populations map](#). After applying the equity tool, additional equity considerations were added to the measure write-up, but the language of the measure itself did not change.

## Community Engagement

Participants in the first community workshop expressed strong interest in more bike infrastructure, including a fleet of bicycles for County employees. A respondent in the public survey also raised that "protected-and-connected bike networks" should be built using existing funds. Practical ways to encourage walking and biking, like creating shade cover with trees and reducing the amount of asphalt in newly constructed buildings to create cooler areas, were also proposed.

Overall in the public survey, respondents expressed strong support for promoting efficient micromobility by offering active mobility options and building a more encouraging environment to use them, as one respondent pointed out, "Prioritize making a highly functional transportation system across the County (and interacting with other Counties) that integrates transit and micromobility to work together and replace most car trips. Encourage not only electrification of fleet vehicles, but also appropriate scaling to use e-bikes where appropriate."



## Metrics and Outcomes

Success for this measure will be realized through an increase in the number of employees who are active travel commuters. GSA Logistics will monitor the number of active transit users through its annual commuter survey.

## T 9: Transit Pass Program

**Expand the transit pass program to all agencies to encourage bus and rail for business travel and expand transportation demand management (TDM) services.**

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
a. Promote a business-only Clipper Card access program throughout County agencies.	<b>GSA-Logistics</b>	GHG:  County Operations  Resilience:  County Operations	Capital: Current  +     Personnel:    	 Flexible Services
b. Create or promote a regional ride-sharing program and encourage participation through TDMs.	<b>GSA-Logistics</b>	GHG:  County Operations  Resilience:  County Operations	Capital: Current  +     Personnel:    	 Flexible Services

## Background and Description

Public transportation can offer a convenient, cost-effective travel option that reduces County employees' vehicle miles traveled (VMT) and commute emissions. The American Public Transportation Association states, "Communities with strong public transportation can

reduce the nation's carbon emissions by 37 million metric tons yearly.<sup>9</sup> Therefore, a Countywide Clipper Card check-out program was established to encourage public transportation for business-related travel. In participating departments, employees can check out a Clipper transit card from a designated departmental liaison when they want to use public transportation for County business travel. Currently, nine County agencies operate a business travel Clipper Card check-out service. With supporting usage information collected from the annual commute survey, GSA Logistics will periodically contact and encourage additional departments to adopt the Clipper Card check-out program.

Six Bay Area transportation agencies and counties recently combined their commuter incentive networks to create a TDM program that provides seamless access to carpool and vanpool ride-matching and eligibility-based trip rewards.<sup>10</sup> Joining this TDM program, or creating one like it, will dramatically expand commuter access to publicly offered resources, services, and incentive programs both within and around Alameda County.

In partnership with a rideshare company, the County can offer a TDM ride-sharing service where employees commuting from a common area to the same destination can use a rideshare vehicle. In 2019, the GSA Logistics team developed an ArcGIS map that mapped where County employees are commuting from and to. Using the updated ArcGIS map, the County can optimally place rideshare vehicles at commuter hub locations. This program will reduce commuter costs to employees and substantially decrease the County's commuter-based emissions.

## Vision 2026 Alignment

Expanding the transit pass program, and supporting other TDM services, supports the Accessible Infrastructure 10X goal. The Clipper Card program provides an easy-to-use business commute option for employees, and participation in a regional TDM program will increase such opportunities.



<sup>9</sup> "Public Transportation Reduces Greenhouse Gases and Conserves Energy," American Public Transportation Association, February 2008, accessed November 10, 2022, <https://mtc.ca.gov/news/agencies-team-make-carpooling-more-convenient>.

<sup>10</sup> "Agencies Team to Make Carpooling More Convenient," Metropolitan Transportation Commission, March 1, 2022, accessed October 18, 2022, <https://mtc.ca.gov/news/agencies-team-make-carpooling-more-convenient>.

## Equity Description

Expanding the Clipper Card program to all agencies will eliminate the current unequal access and avoid further inequalities. With more public transport ridership, the public benefits from fewer cars on the road, alleviating the traffic congestion and air pollution that disproportionately affects BIPOC communities. Using CARB's [California Climate Investments priority populations map](#), the County can prioritize ride-sharing services in low-income and disadvantaged communities. After running the equity tool, equity considerations were added to the measure, but the language itself did not change.

## Community Engagement

In the employee commute survey, 11 percent of respondents were interested in starting a Clipper Card check-out program in their departments. Employees who have used the program in their departments said it was an easy way to conduct business-related travel and avoid the hassle of traffic and parking. In the employee climate survey, 20 percent of respondents selected increasing access to County-paid transit cards as one of their top two options for reducing the County's environmental impact from driving on the job. Participants in the public survey stressed the importance of interacting with other counties and municipalities to promote a more efficient commuting infrastructure.

## Metrics and Outcomes

This measure aims to directly reduce VMT through commuter programs. The numbers of employees using these services will come from the operational logs of the programs themselves as well as the annual commuter survey conducted by GSA Logistics.

# Climate Leadership and Governance

## MEASURES

### Advocacy and Outreach

CLG 1: Legislative Advocacy

CLG 2: External Sharing

CLG 3: Public Outreach

### Plan Implementation

CLG 4: Visions and Strategic Plans

CLG 5: Implementation Structures

CLG 6: Implementation Resources

CLG 7: Targets

### Employee Preparedness

CLG 8: Supporting Remote Work

CLG 9: Employee Safety

CLG 10: Equipping Employees for Climate Response

### Financial Strategy

CLG 11: Investments

CLG 12: Funding Approaches



This section provides a foundation for other plan actions by creating implementation structures, addressing cross-cutting initiatives like telework, and supporting employees' resilience to climate impacts. We will also amplify other plan actions through external communications.

## Section Introduction

### Description

The Climate Leadership and Governance action area includes four action area sections: advocacy and outreach efforts to advance climate action externally, an operational framework for plan implementation, support for employee preparedness, and financial strategies. The measures outlined under these goals provide a foundation for many of the emission reduction and resilience projects in other sections of the GOCAP. Because of their foundational nature, many of these measures do not have direct co-benefits. They represent the initial or supportive steps to enable projects in other sections. These high-level actions include advocacy for climate-friendly policies, telework to reduce office space needs, and funding support for other sections of the GOCAP.

The Alameda County Climate Action Plan for Government Services and Operations Through 2020 included a Climate Protection Leadership section focused on achieving emission reductions by assigning responsible parties, monitoring and reporting on progress, and creating foundational policies and practices. To implement these actions, we formed a cross-agency climate executive committee, developed indicators to track progress, and conducted periodic inventories of our greenhouse gas emissions. We also worked with our County pension fund to support a policy enabling consideration of environmental risk factors when evaluating investments.



Additionally, the County fostered local and regional partnerships with networks and community-based organizations. These efforts and lessons learned from them contributed to the development of the measures in this action area. We will continue to coordinate implementation across agencies, track progress, and build local partnerships.

### Greenhouse Gas Reductions

The measure in this section that most directly contributes to operational greenhouse gas reductions is expanding telework (CLG 8). To meet the challenge of COVID-19, many employees at the County started working remotely from their residences. Employees who already teleworked on occasion increased their telework days. Continuing to

support telework, for job roles where it is feasible, is a low-cost method to significantly reduce operational emissions. As one of the largest employers in the region with over 9,500 employees, the County can help reduce regional greenhouse gas emissions and air pollution by supporting County employees' continued telework.

Climate Leadership and Governance measures contribute to global greenhouse gas reductions through climate policy advocacy and low-carbon investment choices. State and federal actions and investment decisions can significantly reduce emissions far outside County boundaries.

### Resilience Benefits Overview

Measures in this section support resilience by providing resources for employees to support their clients during climate shocks. Measures in this section also support personal and household preparedness for County employees because resilient and prepared employees can better support their clients and the community to withstand and recover from stressors related to climate change.

### Equity Overview

Frontline residents, those who will be first and most affected by climate change, often have the least capacity to prepare for and respond to climate change impacts. Frontline communities' needs are addressed in the Climate Leadership and Governance measures through legislative



advocacy and local investing. Employees will also be trained on equitable community engagement and how climate impacts are affecting community residents.

Measures in this section relating to employee preparedness include a focus on the employees who are most exposed to climate impacts, such as outdoor workers.

### Vision 2026 Alignment

Measures in this section support state and federal climate action, preparedness for climate shocks, and investing for a green economy. These actions will contribute to Vision 2026 elements including Healthy Environment, Thriving and Resilient Population, and Prosperous and Vibrant Economy. Specific measures, such as supporting remote

work and employee safety, support the 10X goals of Accessible Infrastructure and Healthcare for All.

### Monitoring and Reporting

Due to the foundational nature of this section, progress will generally be determined by assessing completion

of submeasures rather than through numerical metrics. Measures in the Plan Implementation subsection create an implementation and accountability structure for monitoring the overall GOCAP.

## Measures

### Advocacy and Outreach

#### CLG 1: Legislative Advocacy

**Advocate for state and federal support of carbon neutrality, climate readiness, and equity-promoting solutions—such as through the County legislative platform and priorities—to accelerate climate action and gain resources for local action.**

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
a. Support state building policies that align with carbon neutrality. Advocate for state and federal policies that support product stewardship programs, right to repair, and other policies supporting sustainable materials management.	<b>GSA-Sustainability</b> CAO	GHG:  Community/Global	Capital: Current  Personnel: 	 <b>Community Prosperity</b> <b>Natural Resources Protection</b>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>b. Advocate at state and federal levels for resources for communities most affected by climate impacts and the local governments that serve them, and advocate that climate solutions be co-created with communities.</p>	<p><b>GSA-Sustainability</b> CAO</p>	<p>GHG:  Community/Global</p>	<p>Capital: Current  + </p> <p>Personnel:</p>	<p> <b>Frontline Community Benefits</b></p>

## Background and Description

This measure builds on the County’s existing [legislative platform](#), which is updated every two years and used as a lobbying and advocacy guide. When policy opportunities arise, County agencies can propose advocacy on specific policies, in alignment with the legislative platform, to the County’s Policy and Legislative Committee. If the proposal is approved, the County’s state or federal lobbyists can then support the identified priorities or assist the agency to reach out to state and federal elected officials.

The last plan included a measure to develop a legislative platform to influence state and federal climate protection discussions. Alameda County’s current legislative platform supports equitable policies that help prepare and protect our communities against climate change impacts and align with greenhouse gas emission reduction goals. The legislative platform includes support for climate resilience, state and federal climate policies, shifting to a clean energy economy, and electrification. We will continue to advocate for state and federal action to support goals in other sections of the plan. Climate action in areas including building electrification and sustainable materials management can better advance with state-level policy support and funding for industry transformation. Direct state and federal funding for local governments will also be valuable in enabling us to invest in planning and preparing for the changes needed due to climate disruptions.

We will advocate for climate solutions co-created by local frontline communities. Support for local frontline communities is in line with the [2021-2022 Alameda County Legislative Platform](#), which states that “Alameda County’s hard-to-count population, including individuals regardless of immigration status, people of color, low-income households, and others, are also more vulnerable to the effects of climate change. Climate change disproportionately harms economically vulnerable communities and individuals.”

The County belongs to organizations—including America Is All In, the Bay Area Climate Adaptation Network (BayCAN), the California State Association of Counties, Green Cities California, ICLEI—Local Governments for Sustainability, the Responsible Purchasing Network, and the Urban Sustainability Directors Network—that advocate on behalf of their members for state and federal climate action. We will continue to tap into the resources of these networks, which help members identify effective policies that support and coordinate efforts to amplify our voices. These networks can assist us in following the development of related legislation at the state and federal levels so that we can

support new legislation or edits to proposed legislation that advance the goals of the GOCAP.

### **Vision 2026 Alignment**

By promoting climate solutions co-created with communities, this measure supports the Thriving and Resilient Population Vision 2026 element. This measure also aligns with the Accessible Infrastructure 10X goal because we will seek to provide support for smart, resilient, and adaptable buildings.

### **Equity Description**

Internal County stakeholders recommended specifying that a goal of this measure is to gain resources for local action because frontline communities will need support to prepare for climate shocks and stressors.

### **Community Engagement**

Among the online feedback forum participants who rated the proposed measure on legislative advocacy, the average priority rating on a scale of -100 to 100 was 59. Online feedback forum participants noted the importance of state and federal action, saying that “communities need resources that only state and federal levels can provide,” “government regulations shape business actions,” and “government has an opportunity to set a standard in procuring” recyclable and recycled-content materials. A participant in the second community workshop suggested the County should look for ways to influence federal policy levers, such as a carbon tax. Such comments indicate that community members want to feel confident that their local government is advocating for local needs at the state and federal levels and supporting policies that will advance the shift to a green economy.

Public survey respondents said that green, efficient County buildings that use clean power are a key strategy for reducing greenhouse gas emissions from County operations, with 67 percent saying this strategy is “very important.” Employee climate survey respondents supported encouraging community-based organizations to conserve energy. State building policies can support our implementing these strategies. One public survey respondent recommended that the County “encourage meaningful state and federal legislation.”

Community members said that support for communities most affected by climate impacts should be a key priority. In the public survey, 65 percent of respondents said it is “very important” for the GOCAP to “prioritize actions that support social equity and vulnerable community members who are most affected by climate impacts.”



## Metrics and Outcomes

We will track advocacy efforts and their results and analyze which approaches were most effective.

### CLG 2: External Sharing

Share lessons learned externally to help amplify benefits of action and gain support for local and regional efforts.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
a. Share lessons and exchange information with other organizations through publishing case studies, speaking at conferences, and contributing to research in the field.	<b>GSA-Sustainability</b>	—	Capital: Current  Personnel: 	—
b. Continue to host green purchasing roundtable meetings to support cities and other public jurisdictions within Alameda County to advance sustainable purchasing in line with climate action goals.	<b>GSA-Sustainability</b>	—	Capital: Current  Personnel:  Existing	—
c. Communicate to potential employment applicants that climate action is part of the purposeful work done by County employees	<b>HRS</b>	—	Capital: Current  Personnel: 	—

## Background and Description

Sharing case studies and lessons learned can amplify our actions' benefits if other organizations implement climate actions we have piloted. Projects must be modified for local needs, but hearing from peer organizations can encourage other jurisdictions to consider similar strategies. We currently share information and lessons learned through associations and conferences, including the Bay Area Climate Adaptation Network, the California Adaptation Forum, Green Cities California, the National Adaptation Forum, the National Council of County and City Health Officials, the Responsible Purchasing Network, and the Urban Sustainability Directors Network. To showcase projects, we have applied for and received awards through the California State Association of Counties, Institute for Local Government, National Association of Counties, and other organizations.



Continuing to share innovative work will assist in obtaining funding for local climate action and gaining community support. Being widely known as an organization with active climate initiatives may also lead to opportunities for collaboration.

Established in 2012 in partnership with [StopWaste](#), Alameda County's [Green Purchasing Roundtable](#) convenes cities and other public jurisdictions several times each year to share resources to advance green purchasing. The roundtable helps to expand local markets for more sustainable products and services. In recent years, roundtable topics have increasingly focused on procurement for greenhouse gas emission reductions.

Sharing the County's climate initiatives, such as through social media, will also assist in employee recruitment. Today's employees care about their employer's social responsibility, including climate commitments. Because County job applicants likely already have an interest in public service, they may find it compelling to hear that climate action is part of the County's mission-oriented work.

## Vision 2026 Alignment

This measure aligns with the Healthy Environment Vision 2026 element because sharing climate action resources will support environmentally sustainable practices in our region.

### Equity Description

Internal County stakeholders suggested that the measure highlight the benefits to local and regional efforts resulting from sharing lessons learned. An equity opportunity in implementation will be to collaborate with local community-based organizations on case studies, research, and conferences.

### Community Engagement

Among the online feedback forum participants who rated the proposed measure on external sharing, the average priority rating on a scale of -100 to 100 was 54. An online feedback forum participant commented that “sharing information is extremely valuable.”

A public survey participant suggested leveraging upgraded County facilities as “models for education.”

### Metrics and Outcomes

Progress on this measure will be determined by assessing to what extent submeasures were carried out. While it is difficult to know the full impact of sharing information, we can keep track of when we hear about other organizations that use our resources or are inspired by our actions. If employment applicants are surveyed, they could be asked if they are aware of the County’s climate action initiatives.

## CLG 3: Public Outreach

**Encourage public climate action through available resources and channels when sharing plan updates.**

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
a. Use channels such as websites, social media, newsletters, public spaces (e.g., County facilities where the public visits), and existing community group partnerships to inform local residents of the County’s climate action process. In addition, share information on city and unincorporated community climate action plans and steps the public can take.	<b>GSA-Sustainability</b> CAO	GHG:  <b>Community/Global</b>  Resilience:  <b>Community</b>	Capital: <b>Current</b>  +     Personnel:    	—

## Background and Description

We hope that community members and organizations will partner on many of the GOCAP initiatives. Updates on the GOCAP's implementation will provide opportunities for individuals and organizations to learn about opportunities to engage in projects in their areas of interest.

Although our progress updates will focus on County services and operations, we hope that sharing them will encourage broader action. Hearing about the County's actions may inspire local organizations and other government agencies to take similar actions. As a large employer, our climate actions may spur other employers to take similar actions.

Because the scope of this plan is County services and operations, residents may also find it valuable to be referred to climate action plans for their city or unincorporated community.

## Vision 2026 Alignment

This measure aligns with the Accessible Infrastructure 10X goal by supporting transparency about County services, in this case as related to climate action and resilience.

## Equity Description

Internal County stakeholders suggested adding community partners as a communication channel.

We will aim to share information in a way that is accessible, such as with multiple languages, visual representations, and provision of alternative text (to assist those using screen readers to access the information provided by an image).

## Community Engagement

Community members identified a need for more education about the urgency of responding to climate change and its impacts. Among the online feedback forum participants who rated the proposed measure on public outreach, the average priority rating on a scale of -100 to 100 was 70. One participant said, "Educating the public is crucial." Another observed that it is important for the County to use a



variety of communication channels: “Using multiple platforms to display data and inform communities can help reach multiple groups and bring about greater change.” Several participants in the second workshop emphasized the importance of outreach that feels relevant and connects to people’s experiences.

One public survey participant said that in 10 years they would like to see their community have “climate education and awareness.” Echoing this, one participant in the first workshop envisioned an Alameda County in 10 years with “improved awareness of our climate impact.” A participant in the public survey noted that public awareness of the climate crisis is starting, but “more is better.” Another public survey participant noted that a challenge facing their community is “lack of education on climate change impacts and solutions.”

A specific suggestion for County government operations and services from the public survey was to provide “the community with the education, tools, and resources to implement their own actions at home to reduce their carbon footprint.” A survey participant noted that many residents are not aware of incentives and rebates. Participants in the transportation breakout of the second workshop suggested increasing outreach about shuttle services from BART to County facilities that are open to the public.

### Metrics and Outcomes

Progress on this measure will be determined by assessing completion of the submeasure.

## Plan Implementation

### CLG 4: Visions and Strategic Plans

**Incorporate climate action and resilience in County visioning processes, to weave climate goals into budgets and strategic planning throughout the organization.**

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
a. Add carbon neutrality and climate resilience to the County’s Vision 2026 and to the strategic plans of County agencies.	<b>CAO</b> <b>GSA-Sustainability</b>	—	Capital: Current  Personnel: 	—

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
b. Include plans for climate impacts when agencies update their continuity of operations plans.	<b>All agencies</b>	Resilience:  <b>County Operations</b>	Capital: <b>Current</b>  +  Personnel:    	 <b>Flexible Services</b>
c. Explore opportunities to advance climate action through District Attorney services.	<b>District Attorney</b> GSA-Sustainability	—	Capital: <b>Current</b>  +  Personnel:    	—

## Background and Description

The County has made significant strides in integrating climate action into many processes. To make more rapid progress, a next step will be to integrate climate goals into budgets and strategic planning.

Building on the 2008 Strategic Vision, Vision 2026 was adopted in February 2018 and takes a comprehensive approach to meet resident needs. While Vision 2026 includes many elements and goals that align with the GOCAP, it does not specifically mention carbon neutrality or climate resilience. In November 2020, Vision 2026 was updated to include telework, so updating it to meet urgent needs would not be unprecedented. Or when Vision 2026 is fully updated, likely in 2026, the GOCAP can be included in the set of strategies used to inform the next vision.

Agencies may also have agency-level strategic plans. These documents may provide additional opportunities to align agency activities with GOCAP goals.

The District Attorney's Office will explore how its initiatives can support climate action, as we did not have the opportunity to explore this during GOCAP development. Initiatives to be explored include the District Attorney's [Justice Academy](#) for high school students, [environmental protection](#) enforcement, and impact litigation. (Local examples of climate impact litigation are the ongoing lawsuits filed in 2017 by the Oakland and San Francisco city attorneys on behalf of their cities asking the courts to hold five large fossil fuel companies

responsible for the costs of sea walls and other infrastructure necessary to protect their populations from consequences of climate change.)

Along with Countywide planning, County agencies have continuity of operations plans, referred to as COOPs, updated every five years. When COOPs are updated, agencies refer to the [Alameda County Emergency Operations Plan](#), which considers drought, energy emergency, flood/storm, infectious disease, landslide/mudslide, wildfire, and other hazards. It is vital that these COOPs reflect climate action and are kept current because their accuracy affects eligibility for disaster funding, which will likely become increasingly necessary.

## Vision 2026 Alignment

The Healthy Environment and Thriving and Resilient Population Vision 2026 elements align with the GOCAP's goals of carbon neutrality and climate resilience.

## Equity Description

Internal County stakeholders suggested adding agency strategic plans to this measure. Many County clients are members of frontline communities vulnerable to climate impacts, so prioritizing climate action and resilience in agency planning provides an opportunity to support these frontline communities and to increase cohesion among service providers on climate-specific issues.

## Community Engagement

Eighty-eight percent of public survey respondents said that County emission reduction and resilience goals should be more ambitious or on par with other Bay Area local governments. To achieve such goals, strategy integration will be needed.

Participants in the first workshop shared that having the County create a vision for climate progress is important to them. They liked that the County already has a vision and wanted to see climate action prioritized. One participant in the first workshop said that the County could better support vulnerable communities facing climate change by focusing more of our budget on “climate solution strategies linked to public health indicators.” Another participant recommended redirecting the budget “to decarbonize all County department services.”

Among the online feedback forum participants who rated the proposed measure on incorporating climate action and resilience to Vision 2026, the average priority rating on a scale of -100 to 100 was 71. Showing support, participants said “adding climate action is extremely important to all County planning” and “climate action should be integrated into all aspects of the County's business.”

Across the community engagement efforts, community members supported planning for climate preparedness, as discussed in the Community Resilience section.

## Metrics and Outcomes

Progress on this measure will be determined by assessing completion of submeasures. Their completion could increase the capacity and resources to achieve climate goals.

### CLG 5: Implementation Structures

**Establish an accountability structure to support successful implementation of the GOCAP. Update this structure when needed to better support staff implementing the GOCAP.**

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
a. Convene in action area or project groups regularly to coordinate. Convene key agency staff in a cross-agency group at least annually to report on progress and identify areas where further coordination or resources are needed. Explore establishing a small group of interested department heads to preview the annual report and to support working groups that need cross-agency executive involvement or guidance.	<b>GSA-Sustainability</b>	—	Capital: Current  +    Existing Personnel:     Existing	—
b. Share an update with the Board of Supervisors and agency/ department heads every year or two at a Board retreat or other designated time. Share an update with all County employees annually on accomplishments and how they can engage.	<b>GSA-Sustainability</b>	—	Capital: Current  +    Existing Personnel:     Existing	—

## Background and Description

When implementing the last plan, we found that cross-agency project teams were effective at carrying out cross-cutting actions. To gain the benefits of working across silos, a climate action plan development group representing 10 County agencies guided the development of this plan.

Because of their roles in plan implementation, most development group members plan to continue their engagement as the group's focus shifts to implementation. The implementation group will continue to advise on overall plan progress, facilitate cross-agency coordination on implementation, coordinate on grant applications, and advise on measures in the Community Leadership and Governance section, such as those relating to implementation and outreach.

We expect the implementation group will meet more frequently early on, as its members develop structures and approaches to best support implementation. In the early phase, the implementation group will communicate relevant plan aspects to stakeholders, help action teams get started, identify opportunities for quick and visible results and catalytic actions that will make future actions easier, identify needed resources, and set up an accomplishment tracking system. To sustain momentum, the implementation group will develop key relationships for implementation; celebrate accomplishments; research fresh ideas, such as through outside speakers; rotate group leadership roles; and keep County leadership and other stakeholders in the loop. To prepare for challenges, the implementation group will anticipate low points, be ready to change course, and reframe failures as learning opportunities. To bring closure, the implementation group will document the outcomes, tell the story of what happened during the implementation process, recognize contributions, engage those involved in evaluating the process, and identify lessons learned.

An important implementation group role will be coordination with action area groups, which may cover an entire action area or related measures within, as makes sense for the action area. Action area groups may be convened specifically for climate plan implementation. The work of an action area may also be coordinated through existing groups, such as a sustainable portfolio working group engaged in actions in the Built Environment section, a sustainable transportation panel involved in Transportation actions, or a disaster preparedness working group where many members are involved in Community Resilience actions. After plan adoption, early efforts of the action area groups will include prioritizing measures and submeasures in their sections and determining which to begin work on first or to prioritize for grant applications. Action area groups will coordinate as their members drive forward related actions, address shared barriers, and share information with employees who are implementing specific projects but are not involved in the action area or implementation group.

Action area groups will provide action area progress updates to the implementation group, which will share these updates with County leadership and employees. Regular updates will help create accountability for continued progress. We hope that the updates will be inspiring to employees and encourage them to get involved and carry out climate actions that make sense in their roles.

## Vision 2026 Alignment

This measure aligns with the Healthy Environment Vision 2026 element because County teams will work to reduce our greenhouse gas emissions and take other steps to support a healthy environment.

## Equity Description

Internal County stakeholders suggested updating all County employees annually on plan progress. Updating employees will ensure that those serving frontline communities or whose roles expose them to climate impacts receive ongoing progress reports and become aware of opportunities for further engagement and collaboration.

## Community Engagement

This measure was not highlighted for review in community engagement because it addresses the internal process for plan implementation.

## Metrics and Outcomes

Progress on this measure will be determined by assessing completion of submeasures and development of a structure that supports GOCAP implementation.



## CLG 6: Implementation Resources

Establish technical assistance resources for agencies, to enable rapid response to climate issues and support for frontline communities.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Identify resources to help project teams find likely grant opportunities. Explore expanding project staff access to grant-writing resources, such as grant writers, and training to improve their ability to access grant funding for climate projects. Examine the potential benefit of a dedicated grant writer and administrator.</p>	<p><b>GSA-Sustainability</b></p>	<p>—</p>	<p>Capital:  <b>Current</b>   + </p> <p>Personnel:  </p>	<p>—</p>
<p>b. Share resources and training about equitable community engagement with County staff leading project implementation.</p>	<p><b>GSA-Sustainability</b></p>	<p>—</p>	<p>Capital:  <b>Current</b>   + </p> <p>Personnel:  </p>	<p>  <b>Frontline Community Benefits</b></p>
<p>c. Based on feedback during plan implementation, establish resources, such as on-call contracts or fellows, to assist agencies to implement plan actions, including preparing for and responding to climate hazards, implementing adaptation measures, and reducing greenhouse gas emissions.</p>	<p><b>GSA-Sustainability</b></p>	<p>Resilience:    <b>County Operations</b></p>	<p>Capital:  <b>Current</b>   + </p> <p>Personnel:  </p>	<p>—</p>

## Background and Description

To increase response for climate impacts and support for frontline communities, the County needs to dedicate resources for climate action. While many projects build on existing work to include climate considerations in current programs, these programs may not have additional funding to add the climate aspects.

Fortunately, we are seeing unprecedented funding support at the state and federal levels for climate action, such as the California Climate Commitment of 2022 (\$54 billion), the Inflation Reduction Act of 2022 (\$391 billion for energy and climate change), and the Infrastructure Law of 2021 (\$550 million for energy efficiency block grants). The White House's [Justice40 Initiative](#) aims for 40 percent of the overall benefits of federal climate investments to flow to communities most affected by climate impacts and least able to respond to them. Alameda County includes such communities.

This plan positions the County well for grant applications because the needed projects and partners have been identified. Implementing climate actions before they are mandated will help us be competitive for grants that encourage early adoption. However, the large number of grants available are challenging to keep track of. Organizations supporting local governments, such as the Bay Area Climate Adaptation Network and the Urban Sustainability Directors Network, provide helpful fund availability trackers, but staff have requested further assistance to identify grants that are good matches for their projects. While some agencies, such as the Alameda County Health Care Services Agency, have internal fund development teams, others do not, and their implementation staff have expressed interest in grant-writing support from professional grant writers.

Because of the importance of hearing from and engaging community members in climate projects, County staff leading project implementation have requested training on equitable community engagement. Organizations including the Government Alliance on Race and Equity, the Institute for Local Government, and the Urban Sustainability Directors Network offer such training resources. The County is planning to launch an Office of Diversity, Equity, and Inclusion; once the office is launched, it may offer resources related to equitable community engagement.

Fellowship programs to support climate action in California local governments include California Climate Action Corps, Climate Corps, and CivicSpark. Since 2020, dozens of Climate Corps fellows have served with Alameda County, supporting the implementation of the last plan.



Fellows have primarily served in the General Services Agency but could support other agencies leading climate action projects. Sharing consultant support across agencies could also be helpful to coordinate efforts.

### **Vision 2026 Alignment**

This measure aligns with the Healthy Environment Vision 2026 element because grants will support work to reduce our greenhouse gas emissions. It also aligns with the Healthcare for All 10X goal, which includes healthy communities, because technical assistance will support projects related to preparing for risks to community health.

### **Equity Description**

Internal County stakeholders recommended specifying that a goal of this measure is to enable agencies to better support frontline communities.

### **Community Engagement**

Among the online feedback forum participants who rated the proposed measure on equitable community engagement resources, the average priority rating on a scale of -100 to 100 was 68.

At the second community workshop, a number of participants recommended that the staff implementing the plan should continue to develop skills in equitable and culturally competent community engagement. Specific suggestions included paying local indigenous communities to consult on or lead climate mitigation and adaptation efforts, including BIPOC and disabled communities and organizations in the plan implementation, and providing translation for outreach and engagement materials and events.

### **Metrics and Outcomes**

Progress on this measure will be determined by assessing completion of submeasures.

## CLG 7: Targets

**Incorporate metrics and methods to track our progress on carbon reduction and resilience goals in a four-year time frame. Track progress toward the 2045 carbon neutrality goal.**

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
a. Engage climate action project leads in setting measurable, motivating metrics and reporting on project-specific metrics.	<b>GSA-Sustainability</b>	—	Capital: Current  Personnel: 	—
b. Establish a process for gathering data for annual progress reporting. Explore opportunities to centralize frequently used data.	<b>GSA-Sustainability</b>	—	Capital: Current  Personnel: 	—

### Background and Description

Targets and metrics help drive action by creating clear goals and accountability. Targets assist in communicating progress to the public and grant funders. The Plan Overview section on Goals and Principles covers past and future targets, including the 2045 carbon neutrality goal aligned with California’s goal. As noted there, because resilience metrics are more challenging to define, Community Resilience Measure 3j covers developing resilience metrics.

An organization-wide greenhouse gas inventory, which we completed every two to three years over the course of the last plan, is important in tracking progress over time but does not provide frequent enough data to enable adjustments. Project-specific metrics allow for a more targeted view so that project teams can make changes if project-specific goals are not being met. Project teams will look at both process and outcome metrics to understand what effort was put in and what changes resulted.

To report on progress annually, we will need to establish which data to collect and by what means. Some data likely to be used in annual progress reporting is currently only readily viewable by staff who have access to specific databases. We will explore whether a dashboard or other means of displaying key metrics would be useful.

### Vision 2026 Alignment

This measure aligns with the Accessible Infrastructure 10X goal by supporting transparency about County progress on climate action and resilience.

### Equity Description

Internal County stakeholders simplified the measure language for clarity.

### Community Engagement

Among the online feedback forum participants who rated the proposed measure on setting project-specific targets and metrics, the average priority rating on a scale of -100 to 100 was 63. While one participant said that setting targets is “not as important as adding climate action into planning and budget,” participants want the County to set measurable but ambitious targets. Participants stated that measurement is “important because it helps people understand the goals and keeps the County accountable,” and that targets are “important to see if we are getting anywhere to fine-tune the plan.”

In the public survey, 88 percent of respondents said that Alameda County’s emission reduction goals should be either more ambitious or on par with those of other Bay Area local governments. Eighty-eight percent said the same about the County’s climate preparedness efforts. Most participants in the first workshop also supported bold climate action. Through progress tracking, the public can be informed about progress on our bold goals.

In the employee climate survey, employees overwhelmingly wanted to see their employer take action. Ninety-one percent of respondents said it was very or moderately important to them that their employer, Alameda County, take climate action to minimize the impact of climate disruptions on our community and employees. Eighty-nine percent said it was very important or moderately important that the County take climate action to reduce our own contribution to climate change from our operations. Through progress tracking, these employees can be informed how this action is going.



## Metrics and Outcomes

Progress on this measure will be determined by assessing completion of submeasures.

## Employee Preparedness

### CLG 8: Supporting Remote Work

**Support broad participation in telework to reduce commute and building emissions, using lessons learned from emergency teleworking. Support interested agencies in setting agency-level goals and frameworks, and consider setting an organization-wide teleworking goal in alignment with state and regional commute reduction goals and goals of leading state and local government employers.**

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
a. Create and promote materials and training on effective telework protocols, communication, collaboration, and cybersecurity awareness.	HRS ITD	GHG:  County Operations	Capital: Current  +    Personnel:    	 Flexible Services
b. Support agencies to identify and address barriers to field work and telework, such as equipment, job-specific software, or digital file access, to enable County employees within appropriate job classifications to work from anywhere and to expand public access to digital services. Support agencies to consider a range of individual circumstances when designing programs, to support productive, safe telework for employees in different situations.	GSA-Sustainability ITD	GHG:   County Operations	Capital: Current  +    Personnel:    	 Flexible Services

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
c. Support departmental telework programs through surveys or similar methods to assess participation and opportunities for improvement. Identify opportunities to support employees who cannot telework, such as with commute benefits.	<b>GSA-Sustainability</b> GSA-Logistics	GHG:  County Operations	Capital: Current  Personnel: 	—
d. Add a telework time code to the time reporting system to track telework hours. Gather and review data to report on participation and trends.	<b>Auditor</b> <b>GSA-Sustainability</b> HRS	—	Capital: Current  Personnel:  Existing	—

### Background and Description

As a large employer, we contribute to Bay Area transportation emissions through our employees’ commutes. Building on current employee participation in telework will help capture the economic, public health, and environmental benefits of telework for our region. The technologies and practices that enable virtual work also support the virtual access to services for community members, which can reduce barriers and be more convenient.

Flexible work is not new to Alameda County. The last plan included measures to implement a Countywide flexible work arrangements program and to transition to technologies that facilitate flexible work arrangements. The [2012 Climate Principles Resolution](#) (R-2012-368) stated that “agencies are encouraged to use County guidelines to offer alternative work arrangements within their agencies; and that the County will strive to identify and minimize barriers to offering alternative work arrangements and to resolve key questions related to the implementation of alternative work arrangements.” Building on agency successes, in 2014 a cross-agency team released guidelines with considerations and sample policies for departmental management when designing agency flexible work programs. (Updated telework guidelines were released in 2020.) In 2014, a cross-agency team produced a video, “[Alternative Work Arrangements Work at Alameda County](#),” to showcase the support of County leaders for flexible work arrangements.

Prior to the COVID-19 pandemic, schedule flexibility was more common than location flexibility. A baseline estimate by agency representatives in 2015 found that about 2 percent of employees were participating in telework and 3 percent in mobile work in the field, with higher percentages participating in compressed work or flexible schedules. Similarly, only 2 percent of respondents to the 2019 employee commuter survey reported working remotely at least one day per week, while 74 percent of respondents were interested or very interested in working remotely.

Employee commutes represented over half of our total operational emissions in 2019.<sup>1</sup> This is not surprising as the transportation sector, primarily cars, is the largest source of greenhouse gas emissions in Alameda County as a whole.<sup>2</sup> While the County's Clean Commute Program promotes carpooling, transit, and other clean commute options, a large-scale shift away from driving alone has been challenging because increasing Bay Area real estate prices mean employees live farther from the workplace.



Through emergency teleworking prompted by the COVID-19 pandemic, a large number of employees with roles suitable for telework started to telework or increased their telework hours. In the March 2021 employee commute survey, 62 percent of the over 3,000 respondents said they had teleworked regularly since March 2020. Of those who teleworked, 50 percent of their total hours worked from March 2020 to March 2021 were remote, compared with 5 percent prior. (The survey was online, so responses are likely more representative of employees who have regular computer access and can more readily telework.)

One key to this shift was technology preparedness. The [annual strategic plans](#) of the Information Technology Department (ITD) emphasize virtual first, meaning that as new processes are developed, they are designed to allow employees to work from anywhere at any time, departments to run operations remotely, and customers to access County service virtually. This approach ensured that in March 2020, the technology infrastructure was ready or quickly rolled out so that employees with suitable roles could work productively and securely from home. Enterprise tools, such as Microsoft Teams for file sharing, virtual meetings, and collaboration, as well as VPN access to the County

<sup>1</sup> "Our Carbon Footprint," Alameda County, accessed November 9, 2022, <https://www.acgov.org/sustain/what/climate/footprint.htm>.

<sup>2</sup> "Bay Area Emissions Inventory Summary Report: Greenhouse Gases: Base Year 2011, Updated January 2015," Bay Area Air Quality Management District, accessed 16 January 2023, [https://www.baaqmd.gov/-/media/Files/Planning%20and%20Research/Emission%20Inventory/BY2011\\_GHGSummary.ashx?la=en&la=en](https://www.baaqmd.gov/-/media/Files/Planning%20and%20Research/Emission%20Inventory/BY2011_GHGSummary.ashx?la=en&la=en).

network, were already set up. The necessary cybersecurity, such as multifactor authentication and encrypted laptops, was in place. Additional tools, such as softphones (software-based phones that allow users to make calls over an internet connection from a desktop or mobile device), have been rolled out to make virtual work even more seamless.

Telework has shifted from an emergency strategy to an ongoing norm in many County agencies. (Flexible work approaches for each agency are determined by that agency based on business needs, which results in the County's exploring a range of strategies.) To identify which agencies are most engaged in telework and to learn from their successes, we can add an option for reporting telework on employee timesheets every two weeks. This data will also enable us to estimate the greenhouse gas emissions reductions from telework.



Building on data collection, we can consider if targets would be helpful to indicate where the organization is headed. Leading local governments have set telework goals: Travis County, Texas, which includes the City of Austin, set a goal of having [75 percent of employees](#) permanently working from home, to maintain the level of telework from 2020. The Washington State Department of Transportation (WSDOT), which includes a number of employees in positions not suitable for telework, has estimated that to achieve 30 to 40 percent overall participation, workers in positions suitable for telework will need to telework three or four days per week on average.

Looking ahead, the Metropolitan Transportation Commission's [Plan Bay Area](#) includes a goal that by 2035, large employers must ensure that no more than 40 percent of their workforce commutes by car on an average workday. Take a scenario where 20 percent of County employees telework four days per week, 20 percent telework three days per week, 20 percent telework two days per week, 20 percent telework one day per week, and 20 percent do not telework. In this scenario, commute greenhouse gas emissions would be reduced by 40 percent, compared to a scenario with no telework; 60 percent of the workforce would be commuting on an average workday, and if one-third of those took transit or biked, we would be in alignment with the Plan Bay Area goal.

Additional benefits of remote work include the potential to reduce the need for administrative office space, as discussed in the Built Environment section. With savings on rental space and owned building space comes the opportunity to create modern, cross-functional spaces for collaboration. Deloitte Consulting estimated that Travis County could reduce administrative space needs by [83 percent](#). The [Real Property Portfolio Management Efficiency, Effectiveness, and Sustainability Policy](#) (R-2022-489) directs the General Services Agency (GSA), which assigns and operates owned and leased County spaces, to work with County agencies to identify worksite strategies and policies to reduce their space requirements. GSA will develop standards for alternative worksites and identify locations around the County

that could be used as touchdown space by County staff from multiple agencies. ITD will continue to work with agencies to automate manual processes or design new solutions that allow services to be provided virtually.

While space reduction takes time, an immediate benefit to telework is remaining competitive in attracting and retaining employees. Many County managers are observing that candidates and employees are expressing a preference for remote or hybrid work. In a Stanford survey of 2,500 Americans in 2020, half of the respondents said having the option to continue working remotely two to three days per week post-COVID was equal to a pay raise of 10 percent or more. An additional 17 percent of respondents valued this option as up to a 9 percent pay raise.<sup>3</sup> Nationally, in a 2021 Prudential survey, 42 percent of current remote workers said that if their current company does not continue to offer remote work options long term, they will look for a job at a company that does.<sup>4</sup> Major Bay Area employers and employers nationwide are offering work location choice to employees.

Agencies with roles suitable to telework have been successful in implementing telework that fits their circumstances and culture. At this stage, it may be helpful to convene informal working groups or agile task forces to support agencies in developing a holistic infrastructure to make remote work as successful as possible. Such groups could identify overarching principles that agencies could communicate to managers, such as “Telework is encouraged but not mandated for employees in suitable roles.” Such groups could explore if any top-down strategies or guiding principles are needed to support agencies in addressing any key policy issues, such as home office equipment needs. WSDOT developed guiding principles in key categories, like location, schedules, technology, and furniture, so that its agencies could update their own documents accordingly. A guiding principle for technology might cover what equipment is standard for workstations to enable telework (e.g., laptop with web camera, headset, wireless keyboard, and mouse) and what level of telework participation is required for employees to be provided with this equipment for use when teleworking.

Current training courses available to employees and managers through the Alameda County Training and Education Center cover contributing as a virtual team member and establishing effective virtual teams. Agencies may be interested in sharing best practices and receiving training on shared implementation challenges. For example, managers may be interested in additional guidance on how to intentionally shape team culture and effectively onboard employees who primarily telework.

## Vision 2026 Alignment

In November 2020, the Board of Supervisors added guidance for remote work and virtual service delivery to Vision 2026, aiming to encourage hybrid work post-pandemic and continued investment in remote-access-enabling technology. This measure is consistent with supporting hybrid work post-pandemic.

---

<sup>3</sup> Rachel Feintzeig, “Does a Raise or Remote Work Sound Better?” *Wall Street Journal*, July 24, 2020, <https://www.wsj.com/articles/does-a-raise-or-remote-work-sound-better-11595581201>.

<sup>4</sup> “Increasingly, Workers Expect Pandemic Workplace Adaptations to Stick,” *Prudential* Newsroom, April 6, 2021, <https://news.prudential.com/increasingly-workers-expect-pandemic-workplace-adaptations-to-stick.htm>.

In addition, this measure aligns with the Healthcare for All 10X goal, which includes healthy communities, because reducing commute trips reduces greenhouse gas emissions and particulate pollution. Telework can provide health benefits to employees, such as more time to exercise.

## Equity Description

Internal County stakeholders noted the importance of ensuring equitable access to resources for productive and safe telework and considering a range of individual circumstances when designing policies. Stakeholders also asked how to support employees who cannot telework; we can do this by connecting them to existing commuter and wellness benefits, providing access to job-related materials and technology support, offering flexible schedules when possible, and asking them what supports they would benefit from. Some of these opportunities are covered in the Transportation section.

## Community Engagement

Among the online feedback forum participants who rated the proposed measure on employee telework, the average priority rating on a scale of -100 to 100 was 79, making telework the highest-priority proposal in the Climate Leadership and Governance section. One participant noted, “Making telework accessible to those applicable is very important because it decreases greenhouse gas emissions in a big way since the County has so many employees.” A participant in the online feedback forum noted that telework can counter gender and racial disparities in household responsibilities: “Telework also benefits people juggling childcare and work, which benefits women and under-represented minorities.” One commenter who reviewed the draft plan noted that telework needs to be “not just supported, but incentivized” and suggested that agency leadership be held accountable for achieving telecommuting goals.

The County conducted an employee commute survey in March 2021. Employees and supervisors expressed great support for telework. Ninety-four percent of employees who were teleworking self-reported being as productive, more productive, or much more productive when teleworking compared to being on-site daily. Similarly, 84 percent of supervisors (representing more than 450 respondents) reported that they were very satisfied or satisfied with staff performance. No supervisors reported they were dissatisfied or very dissatisfied.

Employees identified benefits to their work. For direct service providers, removing the initial commute to the office created extra time to serve clients. “I can assess clients living in Berkeley and Livermore on the same day,” reported one respondent. Another said, “In a day, I complete more tasks from my project lists.” Respondents appreciated the opportunity to learn new technology and become more efficient in their work: “The experience has increased my comfort with digital tools,” reflected one survey participant. Employees commented that these new ways of working have increased their “ability to collaborate with partner organizations who feel coming into Oakland is too much of a hassle” and have led to “much more efficient collaboration when files and screen can be shared.”

Employees noted benefits that can improve employee retention. Employees appreciated the time savings, with 76 percent reporting that their work-life balance had improved. One employee said telework “saves me four hours of commute each day. I travel[ed] by

Caltrain, BART, and County shuttle before each day.” Another employee said, “I would drive over an hour one way to...get behind a computer and work. I can do the same thing now, get behind the computer and work but from home.” An employee shared, “My health and well-being have vastly improved as well as I can now use my normal commute times to exercise instead. I’ve been able to lose a good amount of weight and my blood pressure is now closer to a healthy range.” A number of respondents connected the challenges of long commutes to high housing costs in the East Bay. One respondent stated, “Increase telecommute to alleviate traffic. Many employees cannot afford to live in the communities they serve and have to travel upwards of one to two hours a day to get to work. This creates additional stress to already overwhelmed, understaffed, overworked employees who are under extreme deadlines often performing the work of two to three employees.” One employee said, “I had to move farther away due to increasing rents.” Several also cited increasing gas prices. Comments on safety included, “It has been great teleworking. I never felt safe on BART and walking the streets of Oakland.”

When asked if they would like to telework after social distancing mandates were lifted, 92 percent said yes, including 27 percent who would like to telework five days per week. Employees made comments such as, “My continued ability to work from home will impact whether or not I stay with the County after the pandemic.” A senior manager observed, “Employee morale is better and there is incentive to keep their productivity up so they can continue to telework.”

Employees identified resources that would help them to be even more effective. A number of employees wrote in suggestions for specific process changes or software needs so they could access specialized information and files digitally.

In the employee climate survey, which did not specifically ask about teleworking, respondents consistently proposed teleworking as a solution to reduce emissions. They identified benefits including cost savings to the individual and to the County. Several climate employee survey respondents noted that their commutes exposed them to health issues. One stated, “The fires made commuting worse because some roads were shut down, the smoke was heavy, and I had to have an inhaler because I was wheezing from the smoke.” Some expressed frustration about health exposures on their commutes, supporting “more flexible work from home schedules to avoid extreme heat and breathing in toxic air. My work allows me to do 98 percent of my work from home but my supervisor requires rigidity of having to come to the office five days a week.”

## Metrics and Outcomes

Progress on this measure can be measured by continued levels of participation in remote work and by assessing completion of submeasures.

## CLG 9: Employee Safety

**Integrate employee safety from climate shocks at work and support for personal impacts of climate emergencies into safety and health programs and resources, such as workplace safety guidelines and training (e.g., recognizing signs of heat-related illness, emergency telework), household preparedness, and mental health resources to support employee resilience.**

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
a. Create template messages for GSA divisions to inform employees about how they can protect themselves from hazardous air quality, in alignment with the Air Quality Employee Protection Policy.	<b>GSA-Sustainability</b> GSA	Resilience:  County Operations	Capital: Current  +    Personnel:    	—
b. Support developing two-way communication channels to share advisories with GSA employees, including frontline outdoor, garage, and warehouse workers, before and during climate shocks, such as hazardous air quality, to increase safety and preparedness.	<b>GSA-Sustainability</b> GSA	Resilience:  County Operations	Capital: Current  +    Personnel:    	  <b>Frontline Community Benefits</b> Health and Safety
c. Share resources and deliver training to GSA employees on climate emergency and disaster preparedness to support their personal preparedness and ability to deliver services post-disaster.	<b>GSA-Sustainability</b> GSA	Resilience:  County Operations	Capital: Current  +    Personnel:    	 <b>Health and Safety</b>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>d. Promote the Employee Assistance Program, an existing wellness program that can support employees in challenging situations, to GSA employees, to increase their resilience to climate impacts. Take steps to reach the most affected or hard-to-reach employee groups, such as outdoor workers, Temporary Assistance Program (TAP) employees, and employees who work without a computer.</p>	<p><b>GSA-Sustainability</b> GSA</p>	<p>Resilience:  <b>County Operations</b></p>	<p>Capital: <b>Current</b>  + </p> <p>Personnel:    </p>	<p> <b>Frontline Community Benefits</b> <b>Health and Safety</b></p>
<p>e. Add air quality sensors at key County campuses for more frequent data on air quality.</p>	<p><b>GSA-Sustainability</b> GSA</p>	<p>Resilience:  <b>County Operations</b></p>	<p>Capital: <b>Current</b>  +  </p> <p>Personnel:    </p>	<p> <b>Flexible Services</b></p>

### Background and Description

This measure aims to support employee safety at work, starting with the General Services Agency (GSA) as a pilot. If GSA employees who are personally affected by climate emergencies are supported, these employees will be better able to complete their work and support their clients. If the approaches are effective, best practices and templates can be shared with other agencies that have outdoor workers and heat safety plans, such as the Public Works Agency and the Sheriff’s Department, or other workers affected by extreme heat or hazardous outdoor air quality. When GSA brings on a Safety and Emergency Preparedness Manager as planned, this role may lead these efforts.

Climate effects such as smoke, wildfires, extreme heat, drought, and flooding cause employees hardship and inconvenience. Frontline workers include outdoor, garage, and warehouse workers. Climate disasters take a physical and psychological toll. Supporting employees to deal with climate stressors through training and resources will help them carry out their work responsibilities. Because County employees are designated disaster service workers, being prepared at home means they can better fulfill assigned disaster response duties. One idea

to explore is offering discounts to employees on disaster kits through coordination with kit providers. Another is whether the Employee Assistance Program contractor could offer relevant training on climate shocks and stressors and personal preparedness and resilience. Santa Clara County is developing an all-staff training on climate and health, which may prove a helpful model.

Before climate events, it is important to establish communications channels for employees to receive guidance and updates. Many GSA employees do not work at a computer and so may not receive alerts sent only by email. The County has access to services for emergency notification by phone, but these require an ongoing investment in keeping phone contacts updated.

The County's [Air Quality Employee Protection Policy](#) adopted in 2021, in alignment with state regulations, requires agencies to identify and mitigate exposure, establish a two-way communications system for communicating wildfire smoke hazards to affected employees, and ensure employees receive effective training and instruction. Some respondents in the employee survey shared that they sometimes found out about climate shocks after being exposed to them on the job. Protecting and informing essential workers is important to support employee morale and avoid a disproportionate burden of climate impacts on frontline populations.

Having real-time information on climate events will be important to keep employees informed. The Bay Area Air Quality Management District's air monitoring network provides data with quality assurance but is updated only once per hour, and not all County facilities have stations nearby. Outdoor air quality sensors at County facilities, if maintained and calibrated regularly, could cover gaps in the air quality district sensors and provide more frequent data. Such sensors could potentially be added to the air quality district's or EPA's air quality maps.

Additional information may be available on heat. In September 2022, Governor Newsom [signed legislation](#) to help protect Californians from more frequent and severe heat waves driven by climate change. The legislation builds on California's [Extreme Heat Action Plan](#). The legislation, AB 2238, will create the nation's first extreme-heat advance warning and ranking system to better prepare communities before heat waves.



## Vision 2026 Alignment

This measure aligns with the Healthcare for All 10X goal, which includes disaster preparedness, by supporting County employees with training and preparedness for climate shocks and impacts. Preparedness supports employees' psychological and physical health, and prepared employees support residents' health. The measure also aligns with the Accessible Infrastructure 10X goal, which includes smart infrastructure, such as air quality sensors, and accessibility, such as access to safety updates on any device.

## Equity Description

Internal County stakeholders suggested more specific attention to reaching frontline outdoor workers and other harder-to-reach employees with advisories and wellness program information.



## Community Engagement

Among the online feedback forum participants who rated the proposed measure on informing frontline outdoor workers about protecting themselves from heat and hazardous air quality, the average priority rating on a scale of -100 to 100 was 72, making this the second-highest priority measure in the Climate Leadership and Governance section, after telework. One participant said, "Outdoor workers need more advocacy...beyond existing Cal/OSHA requirements. We need to be more ambitious than that." Another participant said, "More education is needed at the supervisory level on heat illness prevention."

Employee climate survey responses indicated a need for increased support for employee preparedness and advisories on climate impacts. Ninety-one percent of employees responding to the employee climate survey said that it is very (66 percent) or moderately (25 percent) important that Alameda County, as their employer, take action to minimize the effects of climate disruptions on the community and employees.

Twelve percent of employee climate survey respondents work outdoors frequently, such as those in the Public Works Agency, the Sheriff's Office, and the Social Services Agency.

Hundreds of respondents to the employee climate survey reported being affected by climate change, often in ways that influenced their work. In a multiple-option question, 78 percent of respondents said they were personally affected in at least one way by poor air quality.

Of all question respondents, 48 percent said they had to change their daily routine, 38 percent said their health was affected, 26 percent said they could not do work as normal, 20 percent said they did not know how to protect their family, and 16 percent said their child's school was closed. Employees mentioned asthma. One employee said, "My mom and I both developed asthma." Another employee said, "Bad air quality from wildfires forced me to change my daily routine. I stopped using BART and other public transportation and drove myself more...I also suffered from asthma." Employees were concerned about staff working in the field. One employee was concerned that "no guidance by supervisor/managers were shared with staff on how to keep safe for staff and clients." Employees would like to see "information sent out by the County to all departments on air quality warnings."

In a multiple-option question, seventy-three percent of respondents said they were personally affected by heat waves. Of all question respondents, 64 percent said they experienced discomfort, 34 percent said they had to change their daily routine, 21 percent said their health was affected, and 20 percent said they could not work as normal. Employees expressed concerns about their teams, both indoors and outside. One employee said they "had to ensure that cold water was available for myself and my staff." Another said, "My team is constantly having to spend money on bottled water and electrolyte supplements to stay hydrated." Another said, "I've had some team members go home ill." One employee suggested funding dedicated to setting up cooling areas with tents and water.

Employees also reported being affected by other climate events, noting, "Everyone's stress has increased, and mental health has been impacted." Several employees said they were affected by wildfires, working at wildfires, losing a family home, or navigating around fires on their commute.

When asked about priorities for climate preparedness, 52 percent of respondents said it was important for the County to help employees prepare their households for emergencies, the second-ranked priority after being prepared to serve the public. One employee observed, "If employees do not feel their homes or their workplaces are secure/safe during a disaster, it is difficult for them to focus on the needs of the community/clients." Several employees also pointed out the connection between employee preparedness and community support. For example, one employee said, "If I can't protect myself, I can't protect my clients. So learning how to care for my own household is imperative." Others emphasized that they want to serve fully as disaster service workers, which means having a prepared household. One employee highlighted the knowledge-sharing benefits of training staff: "I think it would be great to train County staff on how to prepare for these kinds of emergencies, because then we can share this knowledge with the people and families that we serve."

Employees see a need for communication channels and advisories for employee safety. One employee said, "There have been occasions... when we...receive a policy update to restrict our exposure after we have already been outdoors for long periods of time." One employee suggested a "dashboard for management to be alerted" to air quality advisory and other climate change impacts, in alignment with the proposal for air quality sensors.

When asked about what support they would most want from their employer in preparing for climate impacts, one of the top three items was "education about how to keep myself safe," with 43 percent prioritizing such education. Suggestions included "specific guidelines or policies that allow us to prepare and reduce exposure to heat and smoke"; having "the correct masks, etc. available for us, the workers, at

all times”; “mandatory disaster preparation training...for all employees”; and “opportunity to purchase office and home preparation kits.” Employees would also like to see mental health support: “Training, counseling, or coping for employees. We are worried about our homes...I have had to wait in traffic due to lane closures for fires. I get home late and am expected to carry on as if it didn’t affect my sleep, health, attention span.”

### Metrics and Outcomes

Progress on this measure will be determined by assessing completion of submeasures.

## CLG 10: Equipping Employees for Climate Response

**Train and hear from employees in relevant roles on how climate impacts are affecting the community, to identify and respond to key impacts.**

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
a. Survey employees on how climate impacts are affecting community residents who are clients of County programs. Share information with community-facing employees on how climate impacts affect residents.	<b>GSA-Sustainability</b>	Resilience:  <b>Community</b> <b>County Operations</b>	Capital: <b>Current</b>  +    Personnel:    	 <b>Frontline Community Benefits</b>
b. Support employees to take relevant on-the-job training as new issues arise (e.g., smoke and air quality, fire-prevention design, heat-related illness).	<b>GSA-Sustainability</b>	Resilience:  <b>County Operations</b>	Capital: <b>Current</b>  +    Personnel:    	 <b>Health and Safety</b>

## Background and Description

County employees in a wide range of roles, including roles that are not directly community facing, need to be aware that community residents are dealing with climate-exacerbated smoke, wildfire, extreme heat, drought, and flooding.

Employees who are in community-facing roles have valuable information about how climate impacts are affecting the clients of County programs. To support residents, we will work to identify how climate impacts affect them. Employees can then better determine, in consultation with frontline communities, what support County programs can offer clients related to these climate impacts. Pilot resilience projects, such as the Air Quality Communications Protocol development and the Cooling Our Communities tree planting and heat preparedness program, have followed this process through the [climate change adaptation workshop approach](#) with successful results.

This measure complements Community Resilience Measure 1b, which addresses training client-facing program staff and augmenting existing training. This measure is about broader education, reaching non-client-facing employees in roles related to climate impacts. On-the-job training can help employees learn about best practices to prepare for and address issues that have broad applicability, such as heat-related illness, or are specific to their roles, such as fire-prevention design for employees involved in fire prevention or building design. On-the-job training can help employees learn how to address interactions between climate-related effects, such as when poor air quality and extreme heat occur at the same time.

## Vision 2026 Alignment

This measure aligns with the Healthcare for All 10X goal, which includes public health, by equipping employees to identify climate health impacts on clients and to protect themselves and support clients to protect themselves from such impacts. It also aligns with the Accessible Infrastructure 10X goal because on-the-job training topics may include smart building technologies and design for climate safety.

## Equity Description

Internal County stakeholders recommended adding the phrase “on-the-job” to clarify that the training would cover work-related topics. They recommended using other approaches in addition to online surveys to hear from employees about how climate impacts affect community residents, as employees who do not work at desks may be less likely to complete an online survey.

## Community Engagement

Among the online feedback forum participants who rated the proposed measure on equipping employees for climate response, the average priority rating on a scale of -100 to 100 was 56. One participant said, “All employees need to be better trained in climate impacts and resources to help the communities they serve.”

Ninety-one percent of employees responding to the employee climate survey said that it is very or moderately important that Alameda County, as their employer, take action to minimize the impact of climate disruptions on the community and on employees. Further surveys will help determine what actions are most needed, and training and information on impacts to residents will help employees act.

Employees have important information on how climate impacts affect community residents who are clients of County programs. Hundreds of respondents to the employee climate survey reported that their clients are affected by climate change. In a multiple-option question, 47 percent of respondents said clients were affected in at least one way by poor air quality. Of all question respondents, 35 percent said clients did not have access to N95 masks during wildfires, 30 percent said clients did not have access to clean air during wildfires, 27 percent said client health was affected, 21 percent said clients did not know how to protect themselves, and 17 percent said clients could not be served at outdoor venues.

In a multiple-option question, 40 percent of respondents said clients were affected in at least one way by heat waves. Of all question respondents, 28 percent said clients had to find cool places, 26 percent said clients' daily routines were affected by heat, 25 percent said clients did not have access to cool places to be, 19 percent said clients experienced heat illness, and 12 percent said clients could not be served at outdoor venues.

Thirty-three percent of respondents work with clients who are particularly vulnerable to climate impacts on health. These groups may include older adults, people with disabilities, unhoused people, outdoor workers, and children. One employee noted that the added stress from climate events "compounds existing stressors in marginalized communities." Another employee noted, "We see much higher levels of mental health crises when it is very hot outside; also, other heat-related illnesses; urban and low-income clients are negatively impacted and in higher numbers than more privileged clients or more rural." Another employee observed, "clients do not have access to air filtration devices or air conditioning due to limited financial resources."

Employees would welcome resources to better serve clients during climate events. When asked about what support they would most want from their employer in preparing for climate impacts, 45 percent of employees prioritized "resources to share with clients" and 43 percent prioritized "capacity to anticipate specific steps my team needs to take." One respondent stated, "I work in the mobile unit/library and when providing service in low-income neighborhoods, there is a clear lack of access to air conditioning and cooling centers, especially during the pandemic." Another noted their team had "no way to provide communication to client population that our site could be a cool space." Thirty percent prioritized education about what climate impacts are likely to affect their work, and 24 percent prioritized information to share with clients about how clients can prepare.

## Metrics and Outcomes

Progress on this measure will be determined by assessing completion of submeasures.

## Financial Strategy

### CLG 11: Investments

**Manage investment holdings and other holdings to guard against climate risk and benefit from a just transition to a carbon-free economy.**

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Continue to implement the Alameda County Employees’ Retirement Association’s (ACERA) Environmental, Social, and Governance (ESG) Investment Policy, including through proxy votes. Encourage ACERA to become a signatory to the Principles for Responsible Investment and to join the Ceres Investor Network on Climate Risk and Sustainability to encourage companies to address the full scope of ESG issues.</p>	<p><b>Treasurer</b></p>	<p>GHG:</p>  <p>Community/Global</p>	<p>Capital:</p> <p><b>Current</b></p>  <p>+</p>  <p><b>Existing</b></p> <p>Personnel:</p>   <p><b>Existing</b></p>	 <p><b>Community Prosperity</b></p>
<p>b. Provide annual reports on County Treasurer’s Office sustainable investment activities, as required of signatories of the Principles for Responsible Investment.</p>	<p><b>GSA-Sustainability</b></p>	<p>—</p>	<p>Capital:</p> <p><b>Current</b></p>  <p>+</p>  <p><b>Existing</b></p> <p>Personnel:</p>   <p><b>Existing</b></p>	 <p><b>Community Prosperity</b></p>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>c. Develop an approach to measure our performance in incorporating ESG factors in the investment analysis and decision-making process for the Treasurer’s investment pool.</p>	<p><b>Treasurer</b></p>	<p>GHG:                        Community/Global</p>	<p>Capital:                      Current   +                         Existing                      Personnel:                           Existing</p>	<p>                      Community Prosperity</p>
<p>d. Continue to increase the proportion of Treasurer’s investment pool deposits in community banks or local financial institutions. Explore methods to track and report on the impact of investing locally. Explore ways to include transformational local climate investments that benefit frontline communities.</p>	<p><b>Treasurer</b></p>	<p>GHG:                        Community/Global</p>	<p>Capital:                      Current   +                         Existing                      Personnel:                           Existing</p>	<p>                       Community Prosperity                      Frontline Community Benefits</p>
<p>e. Increase awareness of the current ESG options in the 457(b) Deferred Compensation Plan by publicizing them to employees. Explore opportunities to expand ESG options in the plan, such as by adding a target date ESG fund or benchmarking existing funds.</p>	<p><b>Treasurer</b></p>	<p>GHG:                         Community/Global</p>	<p>Capital:                      Current   +                         Existing                      Personnel:                           Existing</p>	<p>                      Community Prosperity</p>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
f. Explore transferring tax-defaulted vacant properties that are unfit for housing or urban agriculture to nonprofits or public agencies for carbon storage projects, such as tree planting.	<b>Treasurer</b>	GHG:  <b>Community/Global</b>  Resilience:  <b>Community</b>	Capital: <b>Current</b>  +    <b>Existing</b>  Personnel:     <b>Existing</b>	 <b>Natural Resources Protection</b>

## Background and Description

As outlined in the 2021–2022 [Alameda County Legislative Platform](#), our Board of Supervisors “actively supports equitable policies to secure resources to combat and prepare our communities for climate change impacts and to accelerate and intensify the actions and investments needed for a sustainable low carbon future.” Responsible management of County investments with consideration of climate risks and green economy opportunities is one key approach to accelerate the investments needed for a low-carbon future.

Alameda County Employees’ Retirement Association (ACERA), our retirement pension plan, manages over \$11 billion of assets on behalf of over 14,000 active and deferred members and over 10,000 retired members and beneficiaries. ACERA adopted an [Environmental, Social, and Governance \(ESG\) Investment Policy](#) in March 2021. The ESG policy states, “ACERA’s Board believes that there are substantial risks associated with climate change that may be materially detrimental to long-term financial returns. ACERA will seek to advance its interests in mitigating climate change risk through available tools, including proxy voting...[T]he implementation of ACERA’s ESG policy will result in long-term value creation for the Plan’s members and beneficiaries.” The policy requires ACERA, when conducting asset manager searches, to “incorporate an ESG section into its due diligence that examines ESG-related criteria within the organization and in the manager’s investment process.” The policy also states that “ACERA’s investment managers and service providers will be asked by ACERA to complete an annual questionnaire that discloses ESG initiatives and factors incorporated at the organization and within the investment approach. ACERA expects that all potentially material risks and opportunities will be identified by the provider.” As a member of the ACERA Board, the Treasurer will continue to monitor implementation and suggest additional approaches to achieve the goals of the ESG policy, such as joining networks that provide investors with support to meet their ESG goals.

The Treasurer’s investment pool of cash reserves is about \$7 billion. These are funds managed for County agencies, school districts, and special districts. They are invested in fixed income securities to maintain liquidity, such as certificates of deposit, treasury notes and bonds, and callable Freddie Mac and Fannie Mae bonds. The [Treasurer’s Investment Policy for 2022](#) states that “Investments will be made

with responsible investment goals to the extent that such investments achieve substantially equivalent safety, liquidity and yield compared to other investment opportunities available at the same time. The Treasurer will actively incorporate ESG factors in its investment analysis and decision-making process and will work to enhance its effectiveness in implementing the principles of responsible investing.” The Treasurer’s Office has engaged a company that provides an ESG benchmarking tool, YvesBlue, to review the portfolio on a monthly basis; the monthly review will be included in the publicly posted financial information. The Treasurer has become a signatory of the Principles for Responsible Investment. Supported by the United Nations, the Principles for Responsible Investment supports an international network of investor signatories to incorporate ESG factors into their investment decisions to enhance returns and better manage risks. Using expert resources, the Treasurer’s Office will continue to monitor, report on, and expand the use of ESG factors. The Treasury Oversight Board, the advisory committee for the investment pool, will be engaged in these efforts.



As mentioned in the Plan Overview, the County’s Vision 2026 platform aligns with the Sustainable Development Goals (SDGs) adopted by the United Nations. A common approach globally to measure investment portfolio sustainability is by the portfolio’s alignment with SDGs. Therefore, using existing tools to measure our portfolios’ alignment with the SDGs is a good proxy for how well the portfolios are in alignment with Vision 2026.

The 457(b) Deferred Compensation Plan, overseen by the County Treasurer’s Office, included over \$800 million in employee retirement accounts in early 2020. 457(b) plans are voluntary tax-deferred retirement savings plans for government employees, similar to 401(k) plans. Plan participants currently have access to the following [mutual fund option: Impax Sustainable Allocation Fund Class Institutional \(PAXIX\)](#). As of September 2022, Morgan Stanley Capital International [gives this fund](#) an ESG rating of “AA” (a rating that signifies an ESG leader) and says it has moderate carbon intensity. It has 0.3 percent of revenues from fossil fuels and 4 percent of revenues from green holdings, such as clean energy. As of August 2022, Morningstar [gives this fund](#) 4 out of 5 stars on its risk-adjusted return. Given employee interest in additional ESG fund options, the Treasurer’s Office will explore additional fund options. The Treasurer’s Office will communicate the availability of existing and future ESG-focused fund options to employees, such as through a video.

California treasurers have the authority to transfer certain tax-defaulted vacant properties that are unfit for housing to public agencies or qualified nonprofits for other uses. The Treasurer's Office is mapping the tax-defaulted properties as part of a larger effort to identify appropriate uses, which could potentially include climate-focused uses, such as planting trees.

### **Vision 2026 Alignment**

This measure supports our shared vision element of a Prosperous and Vibrant Economy by encouraging markets to transition to a carbon-free economy. Because the County's and ACERA's holdings are sizable, they will directly influence the market. In addition, our example as an institutional investor may influence peer investors, which is important because achieving a carbon-free economy will involve shifts by corporations and banks, influenced by their investors and customers.

### **Equity Description**

The transition to a carbon-free economy needs to be made with consideration for equity. The suggestion of joining the Ceres Investor Network on Climate Risk and Sustainability was added to encourage companies in which ACERA invests to address the full scope of ESG issues. The opportunity to benefit underinvested communities was made more explicit by mentioning the opportunity to work with community banks and local financial institutions.

### **Community Engagement**

Among the online feedback forum participants who rated the proposed measure on reducing climate risk in investments, the average priority rating on a scale of -100 to 100 was 60. One commenter highlighted both the importance of alignment with our operational actions and the potential for fossil fuel companies to lose significant value due to policies and market shifts, saying "Climate change is a material threat to retirement savings. Why take climate action elsewhere and then invest employees' savings in oil companies?"

The employee climate survey asked employees if they would like to see more socially or environmentally responsible fund options in the 457(b) deferred compensation plan. Of 623 respondents to this question, 44 percent said yes, showing a demand for more ESG options. Forty-six percent of respondents marked either "Not sure" or "I am not familiar with the 457 deferred compensation plan," indicating that County employees could benefit from additional outreach about the 457(b) deferred compensation plan and ESG options.

### **Metrics and Outcomes**

Progress on this measure will be determined by assessing completion of submeasures.

## CLG 12: Funding Approaches

Explore innovative approaches to fund climate action and resilience—such as internal carbon pricing, a revolving fund, a donations fund, grants, fees, or green bonds—in a manner that does not unfairly financially burden small businesses or low-income communities.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
a. Identify grant funding or no-interest loans or pursue other approaches to reduce up-front capital needs for upgrades to County facilities (as recommended in the Built Environment section), prioritizing facilities that are providing critical services in frontline communities.	GSA-Sustainability	—	Capital: Current  Personnel: 	 <b>Frontline Community Benefits</b> <b>Return on Investment</b>

### Background and Description

As we move toward the goal of carbon neutrality, one of the greatest challenges is how to fund upgrades to County facilities. Even with increased virtual access to services, County buildings will be needed to provide crucial services. The County's portfolio of older buildings requires significant maintenance investments to lower energy use and add green technology. Upgrades can include both efficiency, such as lighting upgrades, and generation, such as solar panels. Over the long term, these upgrades can pay for themselves, but up-front capital investment is required, which can be a barrier.

Fortunately, federal funding programs, including a national green bank to help attract private sector investment to clean energy and transportation investments, are rolling out to support building efficiency. The County can also explore options such as pay-for-performance programs or an internal revolving fund. Pay-for-performance programs include energy savings performance contracts where an energy services company achieves energy savings for a customer's building portfolio and is paid for these services through the energy cost savings. A Presidio Graduate School student team evaluated climate funding options in 2017 for the County and recommended an internal revolving loan fund. A green revolving fund is an internal investment vehicle that provides financing within an organization for implementing energy efficiency, renewable energy, and other sustainability projects that generate cost savings. These savings are used to replenish the fund for the next round of green investments. Such funds are [widely used in universities](#) and are expanding to health care institutions and local governments.

For funding resilience, investing now will pay off in the future because planning ahead is cheaper than reacting later. Federal government studies have found that every dollar invested in disaster preparedness for wind, fire, or flood mitigation, such as through codes or retrofits, pays off about four times on average compared with addressing the damage after a disruption. The cost-benefit ratio is even higher for certain hazards and responses.<sup>5</sup>

Prioritizing facilities in or serving frontline communities will align with federal funding priorities, as the White House's [Justice40 Initiative](#) aims for 40 percent of the overall benefits of federal climate investments to flow to disadvantaged communities that are overburdened by pollution.

### Vision 2026 Alignment

This measure aligns with the Healthcare for All 10X goal, which includes healthy communities, by prioritizing resources needed for upgrades to facilities providing critical services in frontline communities.

### Equity Description

Internal County stakeholders highlighted the importance of ensuring that small businesses and low-income communities are not unfairly burdened financially when exploring innovative approaches to fund climate goals. Stakeholders also suggested prioritizing funding for facilities that will provide critical services in frontline communities.

### Community Engagement

Among the online feedback forum participants who rated the proposed measure on funding strategies, the average priority rating on a scale of -100 to 100 was 65. One participant commented on the importance of upgrading older buildings to reduce emissions. Another participant supported prioritizing frontline communities.

Local residents understand that innovative funding approaches could be significant and important to their community. For example, during



<sup>5</sup> "Natural Hazard Mitigation Saves: 2019 Report," Multi-Hazard Mitigation Council, 2019, <https://www.nibs.org/projects/natural-hazard-mitigation-saves-2019-report>.

the second community workshop, an attendee suggested a voter initiative to fund climate action. One commenter who reviewed the draft plan observed that the region already has high taxes and recommended considering options that don't "burden the people."

### **Metrics and Outcomes**

Progress on this measure will be determined by assessing completion of the submeasure.

# Appendices

A. Credits .....	299
B. Acknowledgements .....	301
C. Action Area Summaries .....	304
D. Outcomes of 2010 Climate Action Plan .....	413

# Appendix A

## Credits

### Artwork

Artworks created by Hilda C. Robinson are featured on the cover and throughout the document. These artworks are part of the Alameda County Art Collection. The Office of the Arts Commission is a division of the Alameda County Auditor-Controller/Clerk-Recorder Agency. Artwork copyright the artist. For more information about the Arts Commission, visit [arts.acgov.org](http://arts.acgov.org)

### Photos

#### Plan Overview

Alameda County Transportation Commission (county map), page 20

Javier Marrero, courtesy of East Bay Community Energy (Scott Haggerty Wind Energy Center, Livermore), page 34

Shane Rounce (hands on tree), page 50

©2013 Mark Singer Photography / [marksinger.com](http://marksinger.com) (Ashland Youth Center), page 54

Artwork from the County's Utility Box Art Program designed by Robert Minervini (Castro Valley Farmers' Market), page 71

Greg Linhares (Old Oakland Farmers' Market), page 76

#### Built Environment

David Wakely (Castro Valley Library interior). Artwork by Jos Sances, part of the Alameda County Art Collection, page 85

Sibila Savage, page 87

©2013 Mark Singer Photography / [marksinger.com](http://marksinger.com) (Ashland Youth Center), page 99

Sigmund (computer screen), page 104

#### Community Resilience

Matthew Millman (Cherryland Fire Station), page 164

Alameda County Flood Control (Peralta Creek), page 169

**Green Economy and Prosperity**

Derick Daily (Port of Oakland), page 176

Centers for Disease Control and Prevention's Public Health Image Library (person getting vaccinated), page 178

Pixabay on Pexels (cutting wood), page 181

Ricardo Gomez Angel (two people carrying metal sheet), page 184

Deputy Sheriffs' Activities League (Dig Deep Farms driver), page 188

Berkeley Public Library, by David Wakely (Tool Lending Library exterior), page 191

Deputy Sheriffs' Activities League (Dig Deep Farms peaches), page 195

Deputy Sheriffs' Activities League (Dig Deep Farms preparing bags), page 196

**Sustainable Materials Management**

Berkeley Public Library, by David Wakely (Tool Lending Library interior), page 213

**Transportation**

Sibila Savage, page 226

Beam Global (portable EV solar charger), page 237

**Climate Leadership and Governance**

Andre m (California State Capitol), page 259

Alameda County Safe Routes to School (event tabling), page 263

Chris Montgomery (virtual meeting with mug), page 269

Luigi Alvarez (traffic on highway), page 277

Karolina Grabowska (planting seedling), page 293

**Outcomes of 2010 Climate Action Plan**

Tima Miroshnichenko (preparing a pot for planting), page 419

A number of clean commuter photos were taken by Jenn Heflin. Photos including green preschool activities, General Services Agency staff at a butterfly garden, and Ashland Youth Center youth at recycling bin were taken by Renata Gray.

In addition, thank you to the Alameda County Community Development Agency, General Services Agency, Health Care Services Agency, Information Technology Department, and Sheriff's Office for sharing photos. Thank you to the Alameda County Emergency Managers' Association and Bay Area Climate Adaptation Network for sharing photos.

## Appendix B

# Acknowledgements

The County is grateful to all the GOCAP contributors, including the many community members and employees who provided their insights. Individuals and organizations with specific roles are listed here. Many more employees and agencies gave input. (In cases where employees changed roles over the course of plan development, their affiliation is listed as of February 2023 or as it was when they left County employment.)

### Action Area Leads

Sarah Church, General Services Agency  
 Karen Cook, General Services Agency  
 Allison Eames, General Services Agency  
 Jency James, General Services Agency  
 Jamesine Rogers Gibson, General Services Agency  
 Emily Sadigh, General Services Agency  
 Gavin Siegert, General Services Agency

### Additional Core Office of Sustainability Team

Stacey Lee, General Services Agency  
 Rachel Kippen, General Services Agency

### Climate Action Development Group

Hank Ackerman, Public Works Agency  
 Tuere Anderson, Health Care Services Agency  
 Anissa Basoco-Villarreal, Social Services Agency  
 Brentt Blaser, Sheriff's Office  
 Douglas Bond, General Services Agency  
 Lorena Briseño, Social Services Agency  
 Jim Browne, Public Works Agency  
 Domingo Cabrera, Sheriff's Office  
 Lincoln Casimere, Fire Department  
 Detra Dillon, General Services Agency  
 Kristi Duenas, Sheriff's Office

Ben Gomberg, Library  
 Erica Grant, Information Technology Department  
 Sybil Gurney, Information Technology Department  
 Julie Hadnot, Social Services Agency  
 Paul Hess, Sheriff's Office  
 Rachel Johnson, General Services Agency  
 Laura Lloyd, County Administrator's Office  
 Elizabeth McElligott, Community Development Agency  
 Lauri McFadden, Health Care Services Agency  
 Sophie McGuinness, Community Development Agency  
 Tom McKimmy, General Services Agency  
 Eric Moore, Fire Department  
 Lynn Peralta, Social Services Agency  
 Michael Rodriguez, General Services Agency  
 Keith Rowan, General Services Agency  
 Deb Sica, Library  
 Pace Stokes, Sheriff's Office  
 Scott Transou, General Services Agency  
 Tim Wesig, General Services Agency

### Climate Corps Fellows Through Strategic Energy Innovations

Olivia Baaten (2021-22)  
 Sofia Barandiaran (2020-21)  
 Bonnie Betts (2019-20)  
 Melissa Brownlie (2020)

Selina Gomez (2019-20)  
 Nicole Haynes (2020-21)  
 Caroline Kim (2021-22)  
 Carol Lee (2022-23)  
 Jennifer Liu (2020)  
 Jessica Navarro (2021)  
 Lexi Oliva (2019-20)  
 Shona Paterson (2020-21)  
 Jocelyn Rodriguez (2021-22)  
 Sam Talarigo (2021-22)  
 Kameron Stoll (2022-23)  
 Chelsea Su (2022)  
 Kamyia Sud (2019-20)  
 Samira Tootla (2022-23)  
 Ellie Vendegna (2022-23)  
 Erin Xavier (2022-23)

**Health Care Services Agency Climate Action Planning Team Members (Not Listed Elsewhere)**

Jessica Blakemore, Health Care Services Agency  
 María D. Domínguez, Health Care Services Agency  
 Roxanna Guide, Health Care Services Agency  
 Angelica Gums, Health Care Services Agency  
 Preston Lam, Health Care Services Agency  
 Aileen Mendoza, Health Care Services Agency  
 Pegah Shahmirzadi, Health Care Services Agency

**Sustainable Portfolio Working Group Members (Not Listed Elsewhere)**

Percy Irving, General Services Agency  
 Regina Park, General Services Agency

**Additional Contributors and Reviewers**

Alison Abbors, Community Development Agency  
 Julie Ackerman, General Services Agency  
 Halima Anderson, Public Works Agency

Joe Angelo, Human Resource Services  
 George Ayala, Health Care Services Agency  
 Hilary Bass, Sheriff's Office  
 Alan Baxter, General Services Agency  
 Karen Ben-Moshe, ALL IN  
 Matt Beyers, Health Care Services Agency  
 Ben Brazelton-Griego, Health Care Services Agency  
 Ron Browder, Health Care Services Agency  
 Arian Bryant, General Services Agency  
 Vanessa Cedeño, Social Services Agency  
 Aneeka Chaudhry, Health Care Services Agency  
 Christine Cherdboonmuang, Social Services Agency  
 Craig Chew, District Attorney's Office  
 Ratha Chuon, General Services Agency  
 Shauna Conner, Probation Department  
 Amy Costa, County Administrator's Office  
 Tamika Cotright, Probation Department  
 Satjit Dale, Auditor-Controller Agency  
 Emile Durette, Social Services Agency  
 Brian Edwards, Library  
 Larissa Estes White, Social Services Agency  
 Scott Estes, Public Works Agency  
 Aracelia Esparza, General Services Agency  
 Cynthia Frankel, Health Care Services Agency  
 Laura Fultz, Health Care Services Agency  
 Kimberly Gasaway, General Services Agency  
 Samson Gee, Human Resource Services  
 Ram Gurumurthy, Information Technology Department  
 Bob Hardamon, Probation Department  
 Ysela Jimenez-Patiño, Health Care Services Agency  
 Brent Kelley, Public Works Agency  
 Terri Langdon, Sheriff's Office  
 Annette Laverty, Health Care Services Agency  
 Joanna Leal, Fire Department  
 Henry Levy, Treasurer-Tax Collector  
 Amber Lo, Public Works Agency

Jennifer Lucky, Health Care Services Agency  
 Lorrie Martinez, General Services Agency  
 Chuck McKetney, Health Care Services Agency  
 John Medlock, Jr., Public Works Agency  
 David Modersbach, Health Care Services Agency  
 Hannah Moore, Health Care Services Agency  
 Kamala Moore, General Services Agency  
 Sharon Moore, Social Services Agency  
 Nicholas Moss, Health Care Services Agency  
 Captain Marty Neideffer, Sheriff's Office  
 Andrew Nelson, Health Care Services Agency  
 Eileen Ng, Health Care Services Agency  
 Tram Nguyen, Health Care Services Agency  
 Quintara Nielson, Sheriff's Office  
 James Oberst, Human Resource Services  
 Michael Osborn, Social Services Agency  
 Carol Powers, Health Care Services Agency  
 Joan Quillio, General Services Agency  
 Latoya Reed-Adjei, Social Services Agency  
 Rachel Richman, Board of Supervisors District 3 (for ALL IN Eats)  
 Leslie Robertson, Public Works Agency  
 Frederick Robinson, Social Services Agency  
 Gabriela Rueda, Social Services Agency  
 Carmelo San Mames, Social Services Agency  
 Ron Seitz, Health Care Services Agency  
 Devon Shaw, Social Services Agency  
 Deputy David Sides, Sheriff's Office  
 Alonzo Smith, Public Works Agency  
 Shadeequa Smith, Probation Department  
 Carl Speaker, Public Works Agency  
 Alan Tam, Public Works Agency  
 Detra Teal, Human Resource Services  
 Gina Temporal, Probation Department  
 Vishal Thacker, Treasurer-Tax Collector  
 Stephanie Tsurumoto, Auditor-Controller Agency

Moses Tsang, Public Works Agency  
 Kat Woolbright, Health Care Services Agency  
 Margarita Zamora, Human Resource Services  
 Casey Zirbel, Health Care Services Agency

#### **Community Engagement Consultant**

Cascadia Consulting Group, Inc.

#### **Targeted Community Engagement Coordination Partners**

Alameda County Health Care Services Agency-Healthcare for the Homeless  
 La Clínica de la Raza  
 My Eden Voice  
 Roots Community Clinic

#### **Equity Consultant**

Beth Altshuler Muñoz Consulting, Inc.

#### **Editing and Graphic Design**

JS Communication Consulting, Inc.  
 Kring Design Studio

## Appendix C

# Action Area Summaries

### Action Areas

#### **Built Environment (BE)**

Manage the County's buildings, infrastructure, and landscapes to reduce greenhouse gas emissions and increase the climate resilience of our County portfolio.

#### **Community Resilience (CR)**

Increase the resilience and preparedness of the communities we serve to protect from climate shocks like heat waves, wildfires, or flooding.

#### **Green Economy and Prosperity (GEP)**

Invest in win-win strategies that reduce the County's environmental footprint while growing the local economy and creating jobs and economic opportunity for residents.

#### **Sustainable Materials Management (SMM)**

Implement upstream solutions and circular economy principles to reduce the amount of waste generated in County operations.

#### **Transportation (T)**

Reduce greenhouse gas emissions in the County's fleet operations and employee commutes.

#### **Climate Leadership and Governance (CLG)**

Amplify actions through external communications; reduce climate risk in investments; and provide a foundation for other plan actions by creating implementation structures, addressing cross-cutting approaches like telework, and supporting employees to prepare for climate impacts.

## BUILT ENVIRONMENT MEASURES

### Program Management

BE 1: Policy Development and Program Management

### Reduce Emissions

BE 2: Decarbonize New Construction

BE 3: Decarbonize the Existing Portfolio

BE 4: Low-Carbon Operations

BE 5: Green Lease

### Reduce and Remove Carbon

BE 6: Optimize Site and Space Planning  
for Carbon Efficiency

BE 7: Minimize Life Cycle Carbon Emissions  
of Construction and Building Materials

BE 8: Carbon Sequestration

### Prepare the Portfolio

BE 9: Climate Resilience for the Building and  
Infrastructure Portfolio

BE 10: Manage Lands for Climate Resilience

BE 11: Water Conservation and Drought  
Preparedness



This section covers how we will manage the County's

buildings, infrastructure, and landscapes to reduce greenhouse gas emissions and increase the climate resilience of our County portfolio.

## Program Management

### BE 1: Policy Development and Program Management

Update the County’s policy and programmatic framework to support implementing industry-leading practices to decarbonize the County’s portfolio, advance carbon sequestration efforts, and incorporate climate considerations into facility and infrastructure planning to achieve the long-term goals of carbon neutrality and resilient County operations.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Establish a sustainable portfolio working group to coordinate policy and programmatic efforts to meet energy efficiency, decarbonization, and resilience goals related to the County’s building portfolio.</p>	<p><b>GSA-Sustainability</b>  <b>GSA-Energy</b>                      GSA-BMD                      GSA-Capital Planning                      GSA-Capital Programs                      GSA-Real Property</p>	<p>—</p>	<p>Capital:                      Current  </p> <p>Personnel:                        Existing</p>	<p>—</p>
<p>b. Adopt an updated green building ordinance by the end of 2024 to support implementing the built environment measures in this plan, the Local Hazard Mitigation Plan, the Real Estate Master Plan, and other relevant County plans and policies, that is in alignment with Vision 2026.</p>	<p><b>GSA-Sustainability</b>  <b>GSA-Energy</b>                      GSA-BMD                      GSA-Capital Planning                      GSA-Capital Programs                      GSA-Real Property                      Advisor: PWA</p>	<p>GHG:                        County Operations</p> <p>Resilience:                        County Operations</p>	<p>Capital:                      Current  </p> <p>Personnel:                        Existing</p>	<p>—</p>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>c. Continue to benchmark and publicly disclose energy and water usage in buildings through standardized energy and water audits and self-reporting.</p>	<p><b>GSA-Energy</b> GSA-BMD</p>	<p>GHG:    <b>County Operations</b></p> <p>Resilience:    <b>County Operations</b></p>	<p>Capital:  <b>Current</b>   + </p> <p>Personnel:       <b>Existing</b></p>	<p>   <b>Natural Resources Protection</b>  <b>Return on Investment</b></p>

## Reduce Emissions

### BE 2: Decarbonize New Construction

Design and construct new buildings and major renovations to produce zero carbon emissions, maximize energy efficiency, incorporate distributed energy resources, and optimize those resources for grid interconnectivity.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
a. Require all new County-funded building construction to be all electric. Ensure the design meets load requirements for current and future electric vehicle infrastructure needs for County and public use.	<b>GSA-Capital Programs</b> GSA-Energy Advisor: GSA-Logistics	GHG:  County Operations	Capital: Current  Personnel:  Existing	 <b>Health and Safety</b> <b>Natural Resources Protection</b>
b. Incorporate into major capital projects on-site distributed energy resources, such as electricity generation with energy storage and solar thermal systems. Ensure systems optimize energy resilience and grid interconnectivity.	<b>GSA-Capital Programs</b> <b>GSA-Energy</b> GSA-BMD	GHG:  County Operations  Resilience:  County Operations	Capital: Current  Personnel:  Existing	 <b>Health and Safety</b> <b>Return on Investment</b>
c. Ensure building design maximizes energy efficiency across all building systems targeting a performance of 10 percent less energy use than required by California Code Title 24.	<b>GSA-Capital Programs</b> GSA-Energy	GHG:  County Operations	Capital: Current  Personnel:  Existing	 <b>Natural Resources Protection</b> <b>Return on Investment</b>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>d. Continue to require all new construction and major renovations with a project budget of \$5 million or greater to achieve a minimum green building rating of <a href="#">LEED®</a> Silver, or an equivalent standard appropriate to the building type and project scope.</p>	<p><b>GSA-Capital Programs</b> GSA-Energy GSA-Sustainability</p>	<p>GHG:  County Operations</p>	<p>Capital: Current </p> <p>Personnel:  Existing</p>	<p> <b>Health and Safety</b> <b>Natural Resources Protection</b> <b>Return on Investment</b></p>
<p>e. Continue to implement state regulatory requirements limiting the global warming potential (GWP) of refrigerants used in new building equipment and infrastructure.</p>	<p><b>GSA-Capital Programs</b> GSA-BMD GSA-Energy GSA-Sustainability</p>	<p>GHG:  County Operations</p>	<p>Capital: Current </p> <p>Personnel:  Existing</p>	<p> <b>Natural Resources Protection</b></p>

### BE 3: Decarbonize the Existing Portfolio

**Decrease the greenhouse gas emissions across our existing building portfolio targeting a 50 percent reduction by 2030 and achieve carbon neutrality in our building operations by 2045.**

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Inventory all small natural gas-fired equipment, including but not limited to residential-style hot water heaters and rooftop heating, ventilation, and air-conditioning (HVAC) package units. Develop a phaseout plan by the end of 2024 to replace them with high-efficiency electric equipment, prioritizing equipment in facilities located in frontline communities disproportionately affected by air pollution.</p>	<p><b>GSA-Energy</b> GSA-BMD Advisor: GSA-Logistics</p>	<p>GHG:  County Operations</p>	<p>Capital: Current  + </p> <p>Personnel:  Existing</p>	<p> <b>Health and Safety</b> <b>Natural Resources Protection</b> <b>Return on Investment</b></p>
<p>b. Require life cycle assessments for the electrification of major building equipment at the time of natural replacement. By the end of 2024, establish equipment replacement decision-making criteria that prioritize the reduction of life cycle costs over first cost, include an accounting for greenhouse gas emissions generated from all sources (e.g., natural gas, refrigerants), and include equity considerations.</p>	<p><b>GSA-Energy</b> GSA-BMD GSA-Capital Programs GSA-Sustainability</p>	<p>GHG:  County Operations</p>	<p>Capital: Current  + </p> <p>Personnel:  Existing</p>	<p> <b>Health and Safety</b> <b>Natural Resources Protection</b> <b>Return on Investment</b></p>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>c. Establish and incorporate energy efficiency performance targets (e.g., EUI, COP) into the basis of design or specifications for mechanical and electrical projects consistent with industry best practices.</p>	<p><b>GSA-Energy</b> <b>GSA-BMD</b> GSA-Capital Programs</p>	<p>GHG:  County Operations</p>	<p>Capital: Current  + </p> <p>Personnel:  Existing</p>	<p> <b>Health and Safety</b> <b>Natural Resources Protection</b> <b>Return on Investment</b></p>
<p>d. Continue to implement green building performance requirements for all renovations, regardless of size, that align with industry best practices for sustainable building materials and energy efficiency performance as appropriate to the building type and project scope.</p>	<p><b>GSA-Capital Programs</b> <b>GSA-BMD</b> GSA-Energy GSA-Sustainability</p>	<p>GHG:  County Operations</p>	<p>Capital: Current  + </p> <p>Personnel:  Existing</p>	<p> <b>Health and Safety</b> <b>Natural Resources Protection</b> <b>Return on Investment</b></p>

### BE 4: Low-Carbon Operations

Operate County buildings using industry best practices to minimize environmental impact.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Develop and implement operational procedures to maximize energy efficiency and the generation potential of renewable energy resources and storage, in alignment with Title 24 and industry best practices, such as ASHRAE standards. Create policies for set points for major building systems. Establish training program and performance accountability within building maintenance operations to meet these goals.</p>	<p><b>GSA-BMD</b> <b>GSA-Energy</b></p>	<p>GHG:  County Operations</p>	<p>Capital: Current  +   </p> <p>Personnel:     Existing</p>	<p>  <b>Natural Resources Protection</b> <b>Return on Investment</b></p>
<p>b. Procure renewable electricity from the local utility provider for County buildings, facilities, and infrastructure.</p>	<p><b>GSA-Energy</b></p>	<p>GHG:   County Operations</p>	<p>Capital: Current  +   </p> <p>Personnel:     Existing</p>	<p>  <b>Health and Safety</b> <b>Natural Resources Protection</b></p>
<p>c. Inventory refrigerant use in building equipment and develop a plan by 2025 to phase out use of high global warming potential (GWP) refrigerants, in line with state and local policies.</p>	<p><b>GSA-Energy</b> GSA-BMD GSA-Capital Programs</p>	<p>GHG:  County Operations</p>	<p>Capital: Current  +   </p> <p>Personnel:     Existing</p>	<p> <b>Natural Resources Protection</b></p>

### BE 5: Green Lease

Develop green lease language for the County’s standard lease agreements that aligns with County building performance standards for energy, water, and resource efficiency.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Incorporate the County’s green building ordinance requirements and design guidelines into build-to-suit development projects, tenant improvement projects, and major renovation projects, as applicable.</p>	<p><b>GSA-Real Property</b></p>	<p>GHG:                        County Operations</p>	<p>Capital:                      Current   +   </p> <p>Personnel:                           Existing</p>	<p>                        Health and Safety                      Natural Resources Protection                      Return on Investment</p>
<p>b. Include procurement of renewable electricity from the local utility provider for building operational needs in lease negotiations when the County is the majority tenant.</p>	<p><b>GSA-Real Property</b></p>	<p>GHG:                        County Operations</p>	<p>Capital:                      Current   +   </p> <p>Personnel:                           Existing</p>	<p>                      Health and Safety</p>

## Reduce and Remove Carbon

### BE 6: Optimize Site and Space Planning for Carbon Efficiency

Plan, design, and manage the County’s building portfolio to minimize greenhouse gas emissions associated with site selection and space use.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Incorporate into real estate master planning and implementation processes criteria consistent with transit-oriented development principles, such as siting new County facilities and leases within walking distance of public transit, major amenities, or the communities that will be served, prioritizing communities that have been historically underserved.</p>	<p><b>GSA-Capital Planning</b>  <b>GSA-Real Property</b>                      Advisor: GSA-Logistics</p>	<p>GHG:                        Community/Global                      County Operations</p>	<p>Capital:                      Current   +   </p> <p>Personnel:                           Existing</p>	 <p><b>Flexible Services</b>  <b>Frontline Community Benefits</b>  <b>Natural Resources Protection</b></p>
<p>b. Develop and implement a strategic plan to reduce administrative office space by maximizing space efficiency in alignment with Board-approved real estate efficiency policies. Consider opportunities for free addressing, flexible touchdown workstations, hoteling, hot desking, and other strategies to enable ongoing telework.</p>	<p><b>GSA-Real Property</b>  <b>GSA-Capital Planning</b>                      GSA-Capital Programs</p>	<p>GHG:                        Community/Global                      County Operations</p>	<p>Capital:                      Current   +   </p> <p>Personnel:                           Existing</p>	 <p><b>Flexible Services</b>  <b>Return on Investment</b></p>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>c. Develop a methodology to consider the direct and indirect economic, social, and environmental costs of carbon emissions. Use this methodology when planning for future capital portfolio changes in building and infrastructure planning and decision-making processes, such as the real estate master plan, facility condition assessments, capital improvement plan, and other funding and financing decisions used by the County.</p>	<p><b>GSA-Capital Planning</b>  <b>GSA-Sustainability</b>                      GSA-Energy</p>	<p>GHG:                        County Operations</p>	<p>Capital:                      Current                        Personnel:                        Existing</p>	<p>                      Return on Investment</p>

## BE 7: Minimize Life Cycle Carbon Emissions of Construction and Building Materials

Minimize greenhouse gas emissions generated throughout the entire building life cycle through design optimization, material selection, and construction practices.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Develop minimum global warming potential (GWP) limits for construction materials, prioritizing concrete and steel initially, in alignment with state and regional efforts, to minimize embodied carbon in construction. Explore opportunities to incorporate reclaimed and carbon-sequestering building materials (e.g., straw bale, carbon capture technology, mass timber, hemp-lime concrete) in construction projects.</p>	<p><b>GSA-Sustainability</b>  <b>GSA-Capital Programs</b>                      GSA-BMD                      PWA</p>	<p>GHG:                        Supply Chain</p>	<p>Capital:                      Current   + </p> <p>Personnel:                        Existing</p>	 Natural Resources Protection
<p>b. Require projects over \$5 million to complete a whole building life cycle analysis in a manner consistent with ISO Standards 21931 and 14044 during the conceptual or schematic design phase. Incorporate findings into the project’s basis of design so that the proposed building demonstrates a minimum of 5 percent reduction in global warming potential (GWP).</p>	<p><b>GSA-Capital Programs</b>                      GSA-Sustainability</p>	<p>GHG:                        County Operations                        Supply Chain</p>	<p>Capital:                      Current   + </p> <p>Personnel:                        Existing</p>	  Natural Resources Protection Return on Investment

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>c. Reduce construction site emissions by incorporating contract provisions that limit idling and encourage or require the use of electric or low-emissions equipment, where feasible. Explore opportunities to require use of R99 renewable diesel in place of fossil diesel when electric equipment is not available.</p>	<p><b>GSA-Sustainability</b>  <b>GSA-Capital Programs</b>                      GSA-BMD                      PWA</p>	<p>GHG:                        Supply Chain</p>	<p>Capital:                      Current                        Personnel:                        Existing</p>	<p>   <b>Health and Safety</b>  <b>Natural Resources Protection</b></p>

### BE 8: Carbon Sequestration

Remove climate-warming pollutants from the atmosphere by sequestering carbon through landscape management best practices.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Leverage grants and partnerships to increase the capacity of County agencies to accelerate planting biodiverse, native, low-pollen trees on County-managed lands in a manner consistent with local and state policies, such as the County’s Bay-Friendly Landscaping policy. Prioritize planting at facilities located in heat-vulnerable communities in the County.</p>	<p><b>GSA-Sustainability</b> GSA-BMD PWA</p>	<p>GHG:  <b>Community/Global</b></p> <p>Resilience:  <b>Community</b></p>	<p>Capital: <b>Current</b>  +   </p> <p>Personnel:    <b>Existing</b></p>	<p> <b>Frontline Community Benefits</b> <b>Natural Resources Protection</b></p>
<p>b. Develop a pilot program in partnership with local agencies to apply compost on County-owned landscapes for carbon farming purposes and assess its efficacy in achieving carbon storage.</p>	<p><b>GSA-Sustainability</b> GSA-BMD PWA</p>	<p>GHG:  <b>Community/Global</b></p>	<p>Capital: <b>Current</b>  +   </p> <p>Personnel:    <b>Existing</b></p>	<p> <b>Natural Resources Protection</b></p>
<p>c. Continue to minimize the use of synthetic fertilizers in favor of compost and mulch application and to implement integrated pest management (IPM) and vegetation management practices to minimize herbicide and pesticide use in alignment with the Board-adopted IPM policy.</p>	<p><b>GSA-BMD</b> <b>PWA</b></p>	<p>GHG:  <b>Supply Chain</b></p>	<p>Capital: <b>Current</b>  +   </p> <p>Personnel:    <b>Existing</b></p>	<p> <b>Health and Safety</b> <b>Natural Resources Protection</b></p>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>d. Require all capital projects with budgets of more than \$5 million where renewable energy infrastructure cannot be installed to maximize tree planting on-site.</p>	<p><b>GSA-Sustainability</b>  <b>GSA-Capital Programs</b>                      GSA-BMD                      GSA-Capital Planning                      GSA-Energy</p>	<p>Resilience:    <b>Community</b></p>	<p>Capital:                      Current   +   </p> <p>Personnel:     </p> <p><b>Existing</b></p>	<p>  <b>Natural Resources Protection</b></p>

## Prepare the Portfolio

### BE 9: Climate Resilience for the Building and Infrastructure Portfolio

Consider and address a range of climate risks when making infrastructure decisions across the portfolio to ensure the County’s buildings and critical infrastructure maximize community resilience in a changing climate. Prioritize investments for essential services to frontline communities and where historical injustices have contributed to disproportionate climate burdens.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Develop and adopt a standardized approach and set of decision-making tools to incorporate climate resilience planning and design into facility decisions by the end of 2024, building on state guidance. The approach and tools should be informed by community input, center equity, and include economic assessment tools, climate projections, and other relevant data.</p>	<p><b>GSA-Capital Planning</b> GSA-Capital Programs GSA-Sustainability Advisor: PWA</p>	<p>—</p>	<p>Capital: <b>Current</b> </p> <p>Personnel:  <b>Existing</b></p>	<p> <b>Frontline Community Benefits</b></p>
<p>b. Assess the climate-related vulnerability of the existing facility portfolio and physical infrastructure by incorporating criteria into the real estate master planning and facility condition assessment processes. Prioritize review of critical facilities and infrastructure, with a focus on maintaining continuity of operations in facilities serving communities on the frontline of climate change.</p>	<p><b>GSA-Capital Planning</b> <b>PWA</b> GSA-Sustainability</p>	<p>Resilience:  <b>County Operations</b></p>	<p>Capital: <b>Current</b> </p> <p>Personnel: </p>	<p> <b>Frontline Community Benefits</b></p>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>c. Use the approach and set of decision-making tools in Submeasure a within strategic planning and investment decision-making processes, such as the portfolio capital planning strategy, capital improvement planning, real estate master plan, and other funding and financing decisions for use of County and Flood Control District funds for infrastructure.</p>	<p><b>GSA-Capital Planning</b>  <b>PWA</b>                      GSA-Energy                      GSA-Sustainability</p>	<p>Resilience:    <b>County Operations</b></p>	<p>Capital:                      Current   +   </p> <p>Personnel:       <b>Existing</b></p>	<p>  <b>Frontline Community Benefits</b></p>
<p>d. Develop and update building and infrastructure ordinances (including the green building ordinance), design standards, specifications, and operating practices to ensure climate resilience of the assets with priority given to green infrastructure or green-gray hybrid solutions.</p>	<p><b>GSA-Sustainability</b>                      GSA-BMD                      GSA-Capital Planning                      GSA-Capital Programs                      Advisor: PWA</p>	<p>Resilience:    <b>County Operations</b></p>	<p>Capital:                      Current   +   </p> <p>Personnel:       <b>Existing</b></p>	<p>  <b>Natural Resources Protection</b></p>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>e. Complete climate risk assessments for capital project investments including (1) new facilities and infrastructure, (2) facilities considered for purchase or lease, and (3) any facilities or infrastructure considered for capital renovations using the approach and decision tools in Submeasure a. Include findings in an evaluation that combines climate projections with equity considerations to decide whether the project should be built, purchased, or renovated beginning in 2025. For major renovation projects that move forward, include as part of the project cost-effective options to increase the facility's or infrastructure's resilience to all natural hazards, including climate impacts.</p>	<p><b>GSA-Capital Planning</b> <b>PWA</b> GSA-Real Property</p>	<p>Resilience:  <b>County Operations</b></p>	<p>Capital: <b>Current</b>  +   </p> <p>Personnel:     <b>Existing</b></p>	<p> <b>Return on Investment</b></p>
<p>f. Develop a list by the end of 2024 (to prepare for funding opportunities) of strategic projects to improve the climate resilience of existing facilities and infrastructure with a focus on distributed clean energy resources, water efficiency and reuse, and other key opportunities related to wildfire, flooding, and other climate-related impacts. Prioritize the list of assets for the County's use that serve as resilience hubs or inclement weather centers for frontline communities, provide critical services in times of emergencies, or where the County is in charge of care and custody.</p>	<p><b>GSA-Energy</b> <b>PWA</b> GSA-BMD GSA-Capital Planning GSA-Capital Programs</p>	<p>Resilience:  <b>County Operations</b></p>	<p>Capital: <b>Current</b>  +   </p> <p>Personnel:     <b>Existing</b></p>	<p> <b>Frontline Community Benefits</b> <b>Return on Investment</b></p>

## BE 10: Manage Lands for Climate Resilience

**Bolster resilience of County-owned and -managed assets by ensuring that County-owned and -managed lands and rights-of-way are developed and conserved, and operated and maintained, in ways that maximize their resilience to climate hazards.**

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
a. Develop a strategic plan for the development of new renewable energy systems on County-owned lands or other brownfields (priority) or greenfield sites.	<b>PWA</b> <b>PWA-Flood</b>	GHG:  <b>County Operations</b>  Resilience:  <b>County Operations</b>	Capital: <b>Current</b>   Personnel:  <b>Existing</b>	 <b>Health and Safety</b> <b>Return on Investment</b>
b. Recommend policy for inclusion in County's legislative platform that allows municipalities and special districts to sell excess renewable energy to the grid.	<b>PWA</b> GSA-Sustainability	—	Capital: <b>Current</b>   Personnel:  <b>Existing</b>	 <b>Return on Investment</b>
c. Develop and implement policy to avoid development in flood-prone areas, and ensure development that does occur in flood-prone areas provides for implementation of future flood mitigation by the developer.	<b>PWA</b>	Resilience:  <b>Community</b>	Capital: <b>Current</b>   Personnel:  <b>Existing</b>	 <b>Health and Safety</b>

## BE 11: Water Conservation and Drought Preparedness

Analyze the potential for drastic reductions of potable water use in buildings and landscapes, and develop a plan by the end of 2024 to achieve those reductions to minimize water-related energy use (process, heat, and delivered water) and guard against drought-related impacts.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
a. Continue to specify highly efficient fixtures, equipment, and heating and cooling systems in construction and maintenance projects to minimize demand for water use in facilities and assess opportunities to upgrade existing fixtures and equipment.	GSA-BMD GSA-Capital Programs GSA-Energy	Resilience:  County Operations	Capital: Current  +    Personnel:     Existing	 Natural Resources Protection
b. Continue to incorporate water-smart landscaping and irrigation design (such as native and drought-tolerant plants and smart irrigation technologies and practices) into newly constructed landscapes to minimize water use, and assess opportunities in existing landscapes to transition ornamental lawn areas to water-smart landscapes and to upgrade existing fixtures and equipment.	GSA-BMD GSA-Energy PWA	Resilience:  County Operations	Capital: Current  +    Personnel:     Existing	  Natural Resources Protection Return on Investment
c. Develop and implement design guidelines for new construction and major renovations that require consideration of design strategies producing alternative water for non-potable uses on-site, including reuse of reclaimed water, gray water, and harvested rainwater.	GSA-Capital Programs GSA-Energy GSA-BMD	Resilience:  County Operations	Capital: Current  +    Personnel:     Existing	  Natural Resources Protection Return on Investment

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>d. Audit existing buildings to understand the biggest opportunities for reclaimed water use and implement cost-effective projects as funding is available.</p>	<p><b>GSA-Energy</b> GSA-BMD GSA-Capital Programs</p>	<p>Resilience:  <b>County Operations</b></p>	<p>Capital: <b>Current</b>  +   </p> <p>Personnel:     <b>Existing</b></p>	<p> <b>Natural Resources Protection</b></p>
<p>e. Continue to implement state regulatory requirements for landscapes to retain stormwater and allow infiltration of the water into the ground through bioswales, permeable surfacing, rain gardens, and other best management practices.</p>	<p><b>GSA-Capital Programs</b> <b>PWA</b> GSA-BMD GSA-Sustainability</p>	<p>Resilience:  <b>County Operations</b></p>	<p>Capital: <b>Current</b>  +   </p> <p>Personnel:     <b>Existing</b></p>	<p> <b>Natural Resources Protection</b></p>
<p>f. Install water submeters in facilities to monitor usage and promptly address leaks and operational issues. Establish operation and maintenance procedures to maximize continued water use efficiency and conservation.</p>	<p><b>GSA-BMD</b> <b>GSA-Energy</b></p>	<p>Resilience:  <b>County Operations</b></p>	<p>Capital: <b>Current</b>  +   </p> <p>Personnel:     <b>Existing</b></p>	<p>  <b>Natural Resources Protection</b> <b>Return on Investment</b></p>

## COMMUNITY RESILIENCE MEASURES

### County System Preparedness

- CR 1: Resilient Emergency Management
- CR 2: Outreach and Communications
- CR 3: Resilient Health and Social Services

### Community Preparedness

- CR 4: Resources for Resilience
- CR 5: Place-Based Resilience
- CR 6: Mental Health and Resilience

### External Coordination

- CR 7: Regional Resilience
- CR 8: Equitable Community Engagement

### Specific Impact Readiness

- CR 9: Reduce Fire Risk
- CR 10: Flood Control



This section covers how we will increase the resilience and preparedness of the communities we serve to protect from climate shocks like heat waves, wildfires, or flooding.

# County System Preparedness

## CR 1: Resilient Emergency Management

Meaningfully, consistently, and equitably integrate climate resilience into emergency management efforts across the County’s functions, with input from the most at-risk communities, regardless of immigration status.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
a. Write and vet three priority emergency plans addressing climate-related impacts. Can include updates/ annexes of current plans. Integrate agency role clarity, regular updates, staff training, and supplies protocols.	<p><b>ACSO-OES</b></p> <p>GSA-Sustainability</p> <p>SSA</p> <p>HCSA</p>	<p>Resilience:</p>  <p><b>Community</b></p>	<p>Capital:</p> <p>Current</p>  <p>Personnel:</p> 	 <p><b>Health and Safety</b></p>
b. Augment exercises and training for emergency management staff, disaster service workers (DSWs), and client-facing program staff with appropriate inclusion of climate-related threats. Train staff in emergency management data and IT systems.	<p>ACSO-OES</p> <p>GSA-Sustainability</p> <p>Fire</p> <p>HCSA</p> <p>HRS</p> <p>PWA</p> <p>SSA</p>	<p>Resilience:</p>  <p><b>Community</b></p>	<p>Capital:</p> <p>Current</p>  <p>Personnel:</p> 	 <p><b>Health and Safety</b></p>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>c. Augment training for the public in community safety, emergency preparedness, and response with appropriate inclusion of climate-related threats.</p> <ul style="list-style-type: none"> <li>i. Offer these training resources to organizations engaged in community safety, such as Alameda County Volunteer Organizations Active in Disasters (VOAD).</li> <li>ii. Refresh or establish plans, policies, and procedures for long-term recovery groups providing post-disaster services to convey best practices and address the needs of the most at-risk residents.</li> <li>iii. Offer public training and resources in the County’s threshold and widely spoken languages.</li> </ul>	<p><b>ACSO-OES</b>                      Fire                      HCSA                      GSA-Sustainability</p>	<p>Resilience:    <b>Community</b></p>	<p>Capital:                      Current   +   </p> <p>Personnel:     </p>	<p>  <b>Health and Safety</b></p>
<p>d. Establish a cross-agency County team to aid disaster preparedness, response, and recovery that will include climate-related impacts.</p>	<p><b>ACSO-OES</b>                      Fire                      GSA-Logistics                      GSA-Sustainability                      HCSA                      SSA</p>	<p>Resilience:    <b>Community</b></p>	<p>Capital:                      Current   +   </p> <p>Personnel:     </p>	<p>  <b>Health and Safety</b></p>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>e. Conduct targeted assessments to identify the populations within the county that are most vulnerable to climate-related emergencies, including assets. Share and work cross-agency to consult assessment results in emergency planning so that emergency response will meet community needs, regardless of immigration status. Share results to inform prioritization of County facilities for resilience and sustainability upgrades.</p>	<p>ACSO-OES GSA-Sustainability HCSA SSA</p>	<p>Resilience:  <b>Community</b></p>	<p>Capital: <b>Current</b>  +   </p> <p>Personnel:     <b>Existing</b></p>	<p> <b>Health and Safety</b></p>
<p>f. Leverage participation in the Alameda County Emergency Managers' Association to share resources and collect input from the region's emergency managers regarding climate preparedness, protection, mitigation, response, and recovery.</p>	<p>ACSO-OES GSA-Sustainability HCSA</p>	<p>Resilience:  <b>Community</b></p>	<p>Capital: <b>Current</b>  +   </p> <p>Personnel:     <b>Existing</b></p>	<p> <b>Health and Safety</b></p>
<p>g. Work with telecommunications providers, when appropriate, to give or expand priority to first responder and decision-maker communications during emergency situations in which telecommunications are disrupted.</p>	<p>Fire HCSA ITD PWA All as needed</p>	<p>Resilience:  <b>Community</b></p>	<p>Capital: <b>Current</b>  +   </p> <p>Personnel:     <b>Existing</b></p>	<p>  <b>Flexible Services</b> <b>Health and Safety</b></p>

## CR 2: Outreach and Communications

**Equitably and accessibly expand and target climate resilience outreach to the public, especially to county residents most affected by climate change.**

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Reach people with information about climate-related events, protective actions, and County-provided climate resources who have not historically been reached by County communication channels, including but not limited to unhoused populations, limited English proficiency (LEP) populations, and those without technology access or proficiency.</p> <p>i. Promote and share information through the “Community Partners” subscription housed in AC Alert so participating community partners can disseminate the information.</p> <p>ii. Partner with trusted community-based and faith-based organizations, 2-1-1, the County Office of Education, schools, childcare, and youth programs to communicate.</p> <p>iii. Leverage communication methods that do not rely on Internet access, such as radio, television, and billboards/ bench advertising.</p>	<p>ACSO-OES HCSA SSA</p>	<p>Resilience:</p>  <p>Community</p>	<p>Capital:</p> <p>Current</p>  <p>Personnel:</p> 	 <p>Frontline Community Benefits Health and Safety</p>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>b. Expand sharing of disaster preparedness, protective actions, and resilience and response information, including through printed material, radio broadcasts, text messages, video, websites, and other media. Information should be in accessible formats and additional languages spoken broadly in the county, including but not limited to Arabic, Cambodian/Khmer, Chinese, English, Farsi, Korean, Spanish, Tagalog, and Vietnamese.</p>	<p>ACSO-OES Fire HCSA SSA</p>	<p>Resilience:  <b>Community</b></p>	<p>Capital: <b>Current</b>  +   </p> <p>Personnel:    </p>	<p>  <b>Frontline Community Benefits</b> Health and Safety</p>
<p>c. Invest in the accessibility and robustness of County virtual engagement protocols and technologies to support access to services in the context of climate disruptions.</p>	<p><b>ITD</b></p>	<p>Resilience:  <b>Community</b></p>	<p>Capital: <b>Current</b>  +   </p> <p>Personnel:    </p>	<p>  <b>Flexible Services</b> Health and Safety</p>
<p>d. Establish a pilot resilience kiosk at a County Library location to help members of the public at all age levels understand air quality information in partnership with the Bay Area Air Quality Management District. Explore innovative offerings, such as hands-on project workshops. Conduct outreach to the public so people know they can come to a County Library location during bad air quality days.</p>	<p><b>Library</b></p>	<p>Resilience:  <b>Community</b></p>	<p>Capital: <b>Current</b>  +   </p> <p>Personnel:    </p>	<p>  <b>Frontline Community Benefits</b> Health and Safety</p>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>e. Develop consistent standards for messaging accessibility. In advance, prepare and translate clear messaging and materials with guidance about anticipated threats. Coordinate internally and with partner jurisdictions to vet and disseminate messages.</p>	<p>ACSO-OES HCSA SSA</p>	<p>Resilience:  <b>Community</b></p>	<p>Capital: <b>Current</b>  +   </p> <p>Personnel:     <b>Existing</b></p>	<p> <b>Health and Safety</b></p>
<p>f. Maintain and expand coordination between all County public information officers and communications/alert system staff.</p>	<p>ACSO ACSO-OE Fire HCSA SSA</p>	<p>Resilience:  <b>Community</b></p>	<p>Capital: <b>Current</b>  +   </p> <p>Personnel:     <b>Existing</b></p>	<p> <b>Health and Safety</b></p>

### CR 3: Resilient Health and Social Services

Ensure the County’s public health and social services are resilient to climate change and address the impacts of climate change on the health and well-being of service recipients, prioritizing those generationally impacted.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
a. Mainstream resilience in public health programming, planning, and financing by ensuring that programs incorporate longer time frames and climate change-related health problems. Incorporate lessons learned during the COVID-19 pandemic to ensure that the County is prepared for future climate-related public health crises (including infectious disease outbreaks).	HCSA	Resilience:  Community County Operations	Capital: Current  +    Personnel:    	  Health and Safety Return on Investment
b. Incorporate an understanding of current and projected climate change impacts and disasters into any relevant updates of health emergency or response-related plans.	HCSA	Resilience:  Community County Operations	Capital: Current  +    Personnel:    	 Health and Safety
c. Provide guidance and resources to health care network partners for incorporation of climate change impacts into annual hazard vulnerability assessments, as appropriate.	HCSA GSA-Sustainability	Resilience:  Community	Capital: Current  +    Personnel:     Existing	 Health and Safety

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>d. Assess the capacity of the public health system to respond to climate health impacts, such as increased chronic disease and infectious disease, especially among medically vulnerable populations, such as children and older adults.</p>	<p><b>HCSA</b></p>	<p>Resilience:</p>  <p><b>Community</b></p>	<p>Capital:</p> <p>Current</p>  <p>Personnel:</p>  <p><b>Existing</b></p>	 <p><b>Frontline Community Benefits Health and Safety</b></p>
<p>e. Guide and provide requirements to community-based organizations (CBOs) providing services to the County.</p> <p>i. Adopt and/or update memorandum of understanding and relevant contract language using climate-informed templates for organizations providing County-funded services to require clear emergency procedures, increase access to County-provided emergency planning resources, and develop a continuity of operations plan to continue or increase service during and after climate-related shocks.</p> <p>ii. Partner with CBOs to develop and implement climate resilience measures in contract language and/or memoranda of understanding.</p>	<p>ACSO GSA-Sustainability HCSA Probation SSA</p>	<p>Resilience:</p>  <p><b>Community</b></p>	<p><b>i.</b></p> <p>Capital:</p> <p>Current</p>  <p>Personnel:</p>  <p><b>Existing</b></p> <p><b>ii.</b></p> <p>Capital:</p> <p>Current</p>  <p>Personnel:</p>  <p><b>Existing</b></p>	 <p><b>Frontline Community Benefits Health and Safety</b></p>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>f. Provide climate-ready training and preparedness resources to help medical care providers prepare for changes in patients' treatments necessitated by climate change (such as monitoring of medications that limit the body's ability to self-regulate heat).</p>	<p><b>HCSA</b></p>	<p>Resilience:</p>  <p><b>Community</b></p>	<p>Capital:</p> <p>Current</p>  <p>Personnel:</p> 	 <p><b>Health and Safety</b></p>
<p>g. Enhance surveillance and laboratory capacity to address changes in food and waterborne illness risk. Inform the regulated community, partner agencies, and community residents about the increasing risks of climate-related food and waterborne illness and measures to protect against them.</p>	<p><b>HCSA</b></p>	<p>Resilience:</p>  <p><b>Community</b></p>	<p>Capital:</p> <p>Current</p>  <p>Personnel:</p>  <p><b>Existing</b></p>	 <p><b>Health and Safety</b></p>
<p>h. Create position(s) within HCSA focused on climate change and health equity to support HCSA's emergency management functions to integrate climate change into agency efforts.</p> <p>i. Create an emergency response task force with representation from each HCSA department to lead centralization of processes and planning for climate change-related work.</p>	<p><b>HCSA</b></p>	<p>Resilience:</p>  <p><b>Community</b></p>	<p>Capital:</p> <p>Current</p>  <p>Personnel:</p> 	 <p><b>Health and Safety</b></p>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
i. Convene relevant partners for planning conversations and/or plan development to help the County be prepared for possible increases in climate migrants and displacements associated with disasters.	ACSO-OES HCSA SSA	Resilience:  Community	Capital: Current  +    Personnel:     Existing	 Frontline Community Benefits
j. Establish metrics for community resilience to climate impacts in Alameda County and pilot tracking and assessment based on these metrics.	ACSO-OES GSA-Sustainability HCSA SSA	Resilience:  Community	Capital: Current  +    Personnel:    	—

# Community Preparedness

## CR 4: Resources for Resilience

Support the most-affected community members with resources at the neighborhood and household levels to increase resilience to climate impacts.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Train staff serving unhoused populations in climate preparedness and response skills. To prepare for the annual fire season and other climate-related air quality impacts, provide masks with instructions to County populations unable to remain indoors, in collaboration with community partners. Build on guidance and training from the Bay Area Air Quality Management District as needed.</p>	HCSA	<p>Resilience:</p>  <p>Community</p>	<p>Capital:</p> <p>Current</p>  <p>Personnel:</p>  <p>Existing</p>	 <p>Frontline Community Benefits Health and Safety</p>
<p>b. Proactively establish in-place contracts for climate shock response services, including appropriate vendor prioritization of the County’s needs over other clients and regular tests of performance and response times.</p> <p>i. Establish in-place contracts for emergency extreme weather sheltering for use during climate shocks. Ensure the climate resilience of these facilities.</p>	GSA HCSA SSA	<p>Resilience:</p>  <p>Community</p>	<p>Capital:</p> <p>Current</p>  <p>Personnel:</p> 	 <p>Health and Safety</p>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>c. Expand participation in programs such as the Low-Income Weatherization Program and East Bay Energy Watch that provide funding and resources for low-income households to make homes more resilient.</p>	<p>HCSA SSA</p>	<p>GHG:  <b>Community/Global</b></p> <p>Resilience:  <b>Community</b></p>	<p>Capital: <b>Current</b>  +   </p> <p>Personnel:     <b>Existing</b></p>	<p> <b>Community Prosperity</b> <b>Frontline Community Benefits</b> <b>Health and Safety</b></p>
<p>d. Augment or develop emergency preparedness and response guidance for people with disabilities and older adults. Incorporate guidance into distribution and education efforts in partnership with people living with disabilities and older adult care networks and organizations. Establish channels for emergency alerts.</p>	<p>ACSO-OES GSA-Sustainability HCSA SSA</p>	<p>Resilience:  <b>Community</b></p>	<p>Capital: <b>Current</b>  +   </p> <p>Personnel:    </p>	<p> <b>Frontline Community Benefits</b> <b>Health and Safety</b></p>
<p>e. Train staff and equip Alameda County home visiting programs serving low-income and/or disabled children and families with information and resources for climate resilience and protective actions. Work with schools and early care and education organizations. Channel climate health and safety information to children and families. Offer information and resources in the County’s threshold and widely spoken languages.</p>	<p>GSA-Sustainability HCSA SSA</p>	<p>Resilience:  <b>Community</b></p>	<p>Capital: <b>Current</b>  +   </p> <p>Personnel:     <b>Existing</b></p>	<p> <b>Frontline Community Benefits</b> <b>Health and Safety</b></p>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>f. Develop warehouse / supply centers as a base of operations to distribute bottled water, protective masks, emergency kits, and other necessary climate shock supplies to housed and unhoused residents (regardless of immigration status), community partners, County-run facilities, and responders. Develop distribution pathways for immediate dissemination of warehouse supplies.</p>	<p><b>ACSO-OES</b> GSA HCSA</p>	<p>Resilience:  <b>Community</b></p>	<p>Capital: <b>Current</b>  +   </p> <p>Personnel:    </p>	<p>  <b>Frontline Community Benefits</b> <b>Health and Safety</b></p>
<p>g. Incorporate climate resilience and response considerations into planning for unhoused communities, including the Office of Homeless Care and Coordination Implementation Plan.</p>	<p>HCSA GSA-Sustainability</p>	<p>Resilience:  <b>Community</b></p>	<p>Capital: <b>Current</b>  +   </p> <p>Personnel:     <b>Existing</b></p>	<p>  <b>Frontline Community Benefits</b> <b>Health and Safety</b></p>
<p>h. Reorganize health emergency supply resourcing for efficient and lasting use. Consider shelf life and community needs when selecting supplies, shifting away from products that expire. Codify processes for regular inventory assessment.</p>	<p><b>HCSA</b></p>	<p>Resilience:  <b>Community</b></p>	<p>Capital: <b>Current</b>  +   </p> <p>Personnel:     <b>Existing</b></p>	<p> <b>Health and Safety</b></p>

## CR 5: Place-Based Resilience

**Support the creation of resilience hubs and other place-based resilience resources—including both County-run resources such as cleaner air centers and community-run resources—in equitably chosen and easily accessible locations to provide community members with essential services before, during, and after climate shocks. Work with community members to identify needs and existing assets to invest in.**

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Support the existing cleaner air, power outage, and cooling center network by increasing guidance and making low-tech information sources available and seeking/making available additional resilience resources, such as improved ventilation, access to mapping of communities most affected, and transportation support to centers.</p>	<p><b>ACSO-OES</b> HCSA SSA</p> <p>For County facilities: <b>GSA</b></p>	<p>Resilience:</p>  <p><b>Community</b></p>	<p>Capital:</p> <p><b>Current</b></p>  <p>Personnel:</p>  <p><b>Existing</b></p>	 <p><b>Frontline Community Benefits</b> <b>Health and Safety</b></p>
<p>b. Conduct a pilot of neighborhood needs and asset mapping including safe gathering points, such as cleaner air, power outage, and cooling centers; public charging stations; resilience and community centers; libraries; and potential temporary shelters.</p>	<p>Convenor: GSA-Sustainability</p> <p>Map Author/ Community Liaison: Library</p> <p>Data providers: ACSO-OES ITD HCSA SSA</p>	<p>Resilience:</p>  <p><b>Community</b></p>	<p>Capital:</p> <p><b>Current</b></p>  <p><b>Existing</b></p> <p>Personnel:</p>  <p><b>Existing</b></p>	 <p><b>Frontline Community Benefits</b> <b>Health and Safety</b></p>



### CR 6: Mental Health and Resilience

**Create culturally and linguistically appropriate programs to support the community’s mental health needs and personal resilience by engaging community stakeholders, service providers, peers, and family/caregivers.**

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Strengthen and enhance mental health education and support in relation to climate-related disasters.</p>	<p><b>HCSA</b></p>	<p>Resilience:</p>  <p>Community</p>	<p>Capital:</p> <p>Current  +   </p> <p>Personnel:</p>     <p>Existing</p>	 <p>Health and Safety</p>
<p>b. Expand community-based crisis response teams used for mental health 9-1-1 calls.</p>	<p><b>HCSA</b></p>	<p>Resilience:</p>  <p>Community</p>	<p>Capital:</p> <p>Current  +   </p> <p>Personnel:</p>     <p>Existing</p>	 <p>Health and Safety</p>
<p>c. Invest in community mental health programs for communities experiencing high rates of isolation and trauma following climate-related disasters, displacements, and other pivotal events, including housing, shelter, and hotel assistance (e.g., “operation comfort” and “project room key”); crisis respite centers, including those that provide peer support; and mobile crisis units.</p>	<p><b>HCSA</b></p>	<p>Resilience:</p>  <p>Community</p>	<p>Capital:</p> <p>Current  +   </p> <p>Personnel:</p>     <p>Existing</p>	 <p>Health and Safety</p>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>d. Seek funding to support mental health providers and outpatient facilities that serve mental health partners, youth, and those experiencing behavioral health challenges in order to update infrastructure at their physical locations to ensure climate resilience.</p>	<p>ACSO HCSA Probation</p>	<p>Resilience:  Community</p>	<p>Capital: Current  +   </p> <p>Personnel:     Existing</p>	<p> Health and Safety</p>
<p>e. Foster a network of social supports (e.g., friends, colleagues, family members, and community members) that cultivate active coping and self-regulation skills to enhance psychological well-being.</p>	<p><b>HCSA</b></p>	<p>Resilience:  Community</p>	<p>Capital: Current  +   </p> <p>Personnel:     Existing</p>	<p> Health and Safety</p>
<p>f. Develop a disaster behavioral health network to enhance planning and coordination among County system providers, community partners, and other counties to ensure the basic needs of mental health clients, such as medication, housing, food, transportation, and others, are met during a natural disaster.</p>	<p><b>HCSA</b> ACSO-OES Fire GSA SSA</p>	<p>Resilience:  Community</p>	<p>Capital: Current  +   </p> <p>Personnel:     Existing</p>	<p> Health and Safety</p>
<p>g. Develop a resource tool kit that provides age-friendly, culturally, and linguistically appropriate counsel to support mental health clients and family and/or caregivers during and after a natural disaster.</p>	<p><b>HCSA</b></p>	<p>Resilience:  Community</p>	<p>Capital: Current  +   </p> <p>Personnel:     Existing</p>	<p> Health and Safety</p>

## External Coordination

### CR 7: Regional Resilience

**Lead within and coordinate with organizations and coalitions and partner with neighboring jurisdictions to access and help build best practices, models, data, and collaboration opportunities for climate action to inform and amplify the County’s work and avoid duplication of effort.**

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Coordinate with the Bay Area Climate Adaptation Network (BayCAN), community-based organizations, and regional coalitions on best practices for anticipated climate impact scenarios and assumptions for planning and infrastructure. Include scenarios with multiple climate/health events occurring at once (such as wildfire smoke, extreme heat, a public safety power shutoff, an oil spill, a tsunami, or a pandemic). Advance and participate in sharing on equity topics and explore options for community advisors.</p>	<p><b>GSA-Sustainability</b></p>	<p>Resilience:</p>  <p><b>Community</b></p>	<p>Capital:</p> <p>Current Existing</p>  <p>Personnel:</p>  <p><b>Existing</b></p>	 <p><b>Health and Safety</b></p>
<p>b. Collaborate with other fire departments, the Governor’s Office of Emergency Services, and CalFire to proactively and equitably prepare for increased fire risk and mutually build capacity.</p>	<p><b>Fire</b></p>	<p>Resilience:</p>  <p><b>Community</b></p>	<p>Capital:</p> <p>Current Existing</p>  <p>Personnel:</p>  <p><b>Existing</b></p>	 <p><b>Health and Safety</b></p>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>c. Participate in the Bay Area Flood Protection Agencies Association; where practicable, invite community members to contribute to decision-making.</p>	<p><b>PWA-Flood Control</b></p>	<p>Resilience:</p>  <p><b>Community</b></p>	<p>Capital:</p> <p>Current</p>  +  <p>Personnel:</p>     <p><b>Existing</b></p>	 <p><b>Health and Safety</b></p>
<p>d. Coordinate with the Association of Bay Area Health Officials (ABAHO) and other relevant Bay Area regional health equity efforts for equitable community recovery and resilience planning as it relates to public health impacts and mandates.</p>	<p><b>HCSA</b></p>	<p>Resilience:</p>  <p><b>Community</b></p>	<p>Capital:</p> <p>Current</p>  +  <p>Personnel:</p>     <p><b>Existing</b></p>	 <p><b>Frontline Community Benefits</b> <b>Health and Safety</b></p>
<p>e. Provide local representation and support to Sector Coordinating Councils, the Regional Consortium Coordinating Council, and various Governmental Coordinating Councils, as applicable, to contribute to regional disaster preparedness and connectivity and secure mutual support for Alameda County in emergencies.</p>	<p><b>ACSO-OES</b></p>	<p>Resilience:</p>  <p><b>Community</b></p>	<p>Capital:</p> <p>Current</p>  +  <p>Personnel:</p>     <p><b>Existing</b></p>	 <p><b>Health and Safety</b></p>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
f. Facilitate coordination between regional partners in 16 critical infrastructure sectors (e.g., emergency services, dams, and utilities) to develop preparedness strategies and provide preparedness opportunities to relevant users.	<b>ACSO-OES</b>	Resilience:  <b>Community</b>	Capital: Current  +    Personnel:    	 <b>Health and Safety</b>

## CR 8: Equitable Community Engagement

Work closely with community organizations and members of the public to advance community resilience.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Facilitate climate capacity building for trusted community organizations.</p> <ul style="list-style-type: none"> <li>i. Co-create culturally appropriate climate impact communications and equip organizations to provide these communications to those they serve.</li> <li>ii. Support organizations to invest in their own resilience to climate shocks and operational sustainability, such as providing training and connections to cost-saving programs.</li> <li>iii. Pilot resources and approaches in community-facing County programs.</li> <li>iv. Streamline a mechanism to compensate and/or reimburse community-based organizations that provide community information dissemination services.</li> </ul>	<p>ACSO-OES Fire GSA-Sustainability HCSA Library SSA</p> <p>Advisor: SSA</p>	<p>Resilience:</p> 	<p>Capital:</p> <p>Current</p>  <p>Personnel:</p>  <p>Existing</p>	 <p>Frontline Community Benefits</p>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>b. Support, equip, and compensate leadership of community members to co-develop the County’s climate resilience outreach and projects. Build in accountability.</p> <p>i. Create avenues for young people in Alameda County to collaborate and co-create climate policy with County leadership. Explore creation of and funding for youth and neighborhood ambassador programs for climate resilience.</p> <p>ii. Explore establishing a mechanism to compensate and reimburse individual community members or clients who conduct work to support the County’s resilience efforts.</p> <p>iii. Identify shared decision-making structures.</p> <p>iv. Explore creation of and funding for a climate resilience, climate justice, and racial equity leadership program that may lead to employment and/or civic leadership opportunities (e.g., board/commission/taskforce).</p> <p>v. Explore creation of and funding for programs that provide financial assistance, e.g., stipends, to communities that have experienced historic inequities or live in high-risk/highly affected areas.</p>	<p>Fire GSA-Sustainability HCSA SSA</p> <p>Youth Programs: HCSA Library SSA</p> <p>Advisor: SSA</p>	<p>Resilience:</p>  <p><b>Community</b></p>	<p>Capital:</p> <p>Current</p>  <p>Personnel:</p>  <p><b>Existing</b></p>	 <p><b>Community Prosperity</b> <b>Frontline Community Benefits</b></p>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>c. Identify and address specific barriers to participation in community engagement on climate among marginalized communities, including through existing and/or future participation studies.</p>	<p><b>GSA-Sustainability</b></p>	<p>Resilience:</p>  <p>Community</p>	<p>Capital:</p> <p>Current</p>  <p>Personnel:</p>  <p>Existing</p>	 <p>Frontline Community Benefits</p>

# Specific Impact Readiness

## CR 9: Reduce Fire Risk

Establish fire fuel reduction and other risk reduction strategies to mitigate increasing risk of fire for community members.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
a. Expand access to wood chipping and other fuel reduction programs for the public and provide information in multiple languages and platforms.	Fire	Resilience:  Community	Capital: Current  +    Personnel:    	 Health and Safety
b. Support the work of external partners to expand the use of grazing to reduce fuel and manage fire risk.	Fire	Resilience:  Community	Capital: Current  +    Personnel:    	 Health and Safety
c. Educate the public and conduct inspections regarding defensible space to aid fire risk reduction, with information in multiple languages and platforms.	Fire	Resilience:  Community	Capital: Current  +    Personnel:     50% Existing	 Health and Safety

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>d. Employ fire management and fuel reduction strategies with climate science best practices.</p>	<p><b>Fire</b></p>	<p>Resilience:</p>  <p><b>Community</b></p>	<p>Capital:</p> <p>Current</p>  <p>Personnel:</p>  <p><b>50% Existing</b></p>	 <p><b>Health and Safety</b></p>
<p>e. Develop an all-encompassing road mapping network that uses GIS technology to overlay on maps for rural roads.</p>	<p><b>Fire</b></p>	<p>Resilience:</p>  <p><b>Community</b></p>	<p>Capital:</p> <p>Current</p>  <p>Personnel:</p> 	 <p><b>Flexible Services</b></p>
<p>f. Consider ways to target the work of fuel mitigation to low-income communities and potential low-income communities within .5 miles of a disadvantaged community as mapped by the California Air Resources Board. Consider job creation opportunities.</p>	<p><b>Fire</b></p>	<p>Resilience:</p>  <p><b>Community</b></p>	<p>Capital:</p> <p>Current</p>  <p>Personnel:</p> 	 <p><b>Frontline Community Benefits</b> <b>Health and Safety</b></p>

### CR 10: Flood Control

**Prepare for and adapt to sea level rise and changes in precipitation patterns through assessments and infrastructure investments.**

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Implement infrastructure improvements based on findings from the Flood Control District’s study of the riverine-tidal interface plus the impacts of sea level rise. Prioritize improvements by outfall channel and zone. Explore additional funds as needed.</p>	<p><b>PWA-Flood Control</b></p>	<p>Resilience:</p>  <p>Community</p>	<p>Capital:</p> <p>Current</p>  <p>Personnel:</p> 	 <p>Health and Safety</p>
<p>b. Participate in regional collaborations to encourage alignment in approaches to climate flood-risk impacts, groundwater intrusion, and more. Continue to participate in the Coastal Hazards Adaptation Resiliency Group (CHARG) to advance flood preparedness throughout the region. Share the San Francisco Bay-Delta Community Model with regional partners and work for regional prioritization of the areas that are most vulnerable.</p>	<p><b>PWA-Flood Control</b></p>	<p>Resilience:</p>  <p>Community</p>	<p>Capital:</p> <p>Current</p>  <p>Personnel:</p>  <p>Existing</p>	 <p>Health and Safety</p>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>c. Incorporate sea level rise and increased storm intensity appropriately into flood control infrastructure projects. Consider the most updated, relevant projections in design and construction and allow for potential future modifications, as necessary.</p>	<p><b>PWA-Flood Control</b></p>	<p>Resilience:</p>  <p>Community</p>	<p>Capital:</p> <p>Current</p>  +   	 <p>Health and Safety</p>
<p>d. Increase early flood warning system capacity and pilot it on a major watershed. Coordinate across County agencies for flood evacuation warnings countywide, especially for unhoused populations in flood-risk areas.</p>	<p><b>PWA-Flood Control</b></p>	<p>Resilience:</p>  <p>Community</p>	<p>Capital:</p> <p>Current</p>  +   	 <p>Health and Safety</p>
<p>e. Acquire and install an Advanced Quantitative Precipitation Information (AQPI) radar system. Continuously calibrate the system against rain gauge data to best inform our understanding of future storms and related water management needs.</p>	<p><b>PWA-Flood Control</b></p>	<p>Resilience:</p>  <p>Community</p>	<p>Capital:</p> <p>Current</p>  +   	 <p>Health and Safety</p>
<p>f. Continue to restore urban creeks throughout Alameda County to more natural conditions to enhance the ability of wildlife species to adapt to climate change, consistent with flood protection measures.</p>	<p><b>PWA-Flood Control</b></p>	<p>Resilience:</p>  <p>Community</p>	<p>Capital:</p> <p>Current</p>  +   	 <p>Natural Resources Protection</p>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>g. Continue to repair and restore capacity/structural integrity to storm drains, channels, levees, and pump stations to enable them to perform to their design capacity in handling water flows.</p>	<p><b>PWA-Flood Control</b></p>	<p>Resilience:    <b>Community</b></p>	<p>Capital:  <b>Current</b>   +   </p> <p>Personnel:       <b>Existing</b></p>	 <b>Health and Safety</b>
<p>h. Develop and implement improvement projects to address drainage deficiencies in various open channels and underground flood control drainage facilities.</p>	<p><b>PWA-Flood Control</b></p>	<p>Resilience:    <b>Community</b></p>	<p>Capital:  <b>Current</b>   +   </p> <p>Personnel:     </p>	 <b>Health and Safety</b>
<p>i. Improve infrastructural flood protection in floodplains identified by the Federal Emergency Management Agency (FEMA), including line and channel improvements and tidegate structure upgrades.</p>	<p><b>PWA-Flood Control</b></p>	<p>Resilience:    <b>Community</b></p>	<p>Capital:  <b>Current</b>   +   </p> <p>Personnel:       <b>Existing</b></p>	 <b>Health and Safety</b>
<p>j. Support access to flood mitigation resources, as appropriate, for businesses, community and faith-based organizations, schools, and residences.</p> <p>i. Offer physical resources (e.g., sandbags).</p> <p>ii. Provide post-event clean-up and opening of public right-of-way.</p>	<p><b>PWA-Flood Control</b></p>	<p>Resilience:    <b>Community</b></p>	<p>Capital:  <b>Current</b>   +   </p> <p>Personnel:     </p>	 <b>Health and Safety</b>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>k. Hold public meetings to receive feedback on flood control projects from those communities affected by projects, and incorporate community needs into planning as feasible.</p>	<p><b>PWA-Flood Control</b></p>	<p>Resilience:</p>  <p>Community</p>	<p>Capital:</p> <p>Current</p>  <p>Personnel:</p> 	 <p><b>Frontline Community Benefits</b></p>

## GREEN ECONOMY AND PROSPERITY MEASURES

### Procurement

GEP 1: Vendor Sustainability and Resilience

GEP 2: Contracting With Small Nonprofits

### Workforce

GEP 3: Hiring on Climate-Related Large Capital Projects

GEP 4: Green Job Promotion

GEP 5: Growing the Alameda County Climate Workforce

### Materials Management

GEP 6: Developing the Regional Circular Economy

GEP 7: Expanding Edible Food Recovery

GEP 8: Sourcing Healthier, Low-Carbon Food

GEP 9: Integrated Circular Food Economy



This section covers how we will invest in win-win strategies that reduce the County's environmental footprint while growing the local economy and creating jobs and economic opportunity for residents.

## Procurement

### GEP 1: Vendor Sustainability and Resilience

Support the resilience and sustainability capacity of current and prospective County vendors and contracted service providers.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Seek resources for and build the capacity of local current and prospective vendors, contracted service providers, and subcontractors to conduct their operations and perform their services in a manner aligned with County sustainability goals.</p> <p>i. Integrate outreach, training, and resources in sustainable, climate-smart, equitable, and climate-resilient operations into programs for current and prospective vendors.</p> <p>ii. Target outreach to small, emerging, and disadvantaged local businesses.</p>	<p>GSA-Sustainability (Convenor)</p> <p>ACSO</p> <p>GSA-OAP</p> <p>GSA-Procurement</p> <p>HCSA</p> <p>Probation</p> <p>SSA</p>	<p>GHG:</p>  <p>Supply Chain</p> <p>Resilience:</p>  <p>Community</p> <p>County Operations</p>	<p>Capital:</p> <p>Current</p>  <p>Personnel:</p>  <p>50% Existing</p>	 <p>Community Prosperity</p>
<p>b. Explore a requirement for successful bidders on high-value contracts to provide a streamlined business resilience and climate plan. Develop any needed training, templates, and checklists to assist with contractor and subcontractor plan understanding and development.</p>	<p>ACSO</p> <p>GSA-Sustainability</p> <p>HCSA</p> <p>Probation</p> <p>SSA</p>	<p>GHG:</p>  <p>Supply Chain</p> <p>Resilience:</p>  <p>Community</p> <p>County Operations</p>	<p>Capital:</p> <p>Current</p>  <p>Personnel:</p> 	 <p>Community Prosperity</p>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>c. Explore new incentives, requirements, mechanisms, and funding for contracted service providers serving populations disproportionately harmed by climate change to support clients' uptake of appropriate protective actions and health services needed before, during, and after climate shocks.</p>	<p>ACSO GSA-Sustainability HCSA Probation SSA</p>	<p>Resilience:  <b>Community</b></p>	<p>Capital: <b>Current</b>  +   </p> <p>Personnel:    </p>	<p> <b>Frontline Community Benefits</b></p>
<p>d. Explore and implement contract mechanisms or other incentives to encourage vendors to advance sustainability in their operations, such as becoming certified by the Alameda County Green Business Program. Encourage businesses to produce sustainable goods locally when possible.</p>	<p>GSA-Sustainability</p>	<p>GHG:   <b>Supply Chain</b></p>	<p>Capital: <b>Current</b>  +    <b>Existing</b></p> <p>Personnel:     <b>Existing</b></p>	<p> <b>Community Prosperity</b></p>

## GEP 2: Contracting With Small Nonprofits

Support small community-based organizations (CBOs) to participate in community outreach designed to advance resilience.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Explore ways to support nonprofit Alameda County CBOs with budgets of under \$500,000 to secure County contracts. Implement new mechanisms, if feasible.</p>	<p>ACSO GSA-Sustainability HCSA Probation SSA</p>	<p>—</p>	<p>Capital: Current   +              </p> <p>Personnel:     </p>	<p>   Frontline Community Benefits</p>

## Workforce

### GEP 3: Hiring on Climate-Related Large Capital Projects

For large climate-related capital projects at the County, meet or exceed goals in existing workforce agreements to prioritize hire of and outreach to local residents with high barriers to employment.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Continue monitoring contractors to prioritize hiring disadvantaged residents on covered projects, with a goal of 40 percent of all apprentice hours worked by disadvantaged residents.</p>	<p><b>GSA-OAP</b> GSA-BMD GSA-Capital Programs GSA-Real Property PWA</p>	<p>—</p>	<p>Capital: Current  +    Existing</p> <p>Personnel:     Existing</p>	<p> <b>Community Prosperity</b></p>
<p>b. Perform robust outreach to connect disadvantaged residents (i.e., those unemployed at commencement of work and sponsored into or enrolled in an approved apprenticeship program) with organizations providing pre-apprenticeship and pre-employment support. Work with outside organizations on outreach to communities of interest, including those who are formerly incarcerated, former foster youth, those who have experienced homelessness, single parents, and others struggling to find full time employment. Make referrals to training as needed.</p>	<p><b>GSA-OAP</b> GSA-BMD GSA-Capital Programs GSA-Real Property PWA</p>	<p>—</p>	<p>Capital: Current  +    Existing</p> <p>Personnel:     Existing</p>	<p>  <b>Community Prosperity</b> <b>Frontline Community Benefits</b></p>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>c. Continue to monitor and enforce adherence to the County’s Project Stabilization and Community Benefits Agreement (PS/CBA).</p>	<p><b>GSA-OAP</b>                      GSA-BMD                      GSA-Capital Programs                      GSA-Real Property                      PWA</p>	<p>—</p>	<p>Capital:                      Current   +                         Existing                      Personnel:                           Existing</p>	<p>                      Community Prosperity</p>

## GEP 4: Green Job Promotion

Promote pathways and access to climate-related County jobs so that employees in climate roles represent the diversity of communities in the County and all groups benefit from the green economy.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
a. Identify climate-related jobs, growth potential, and pathways at the County.	<b>GSA-Sustainability</b>	—	Capital: Current  +  Personnel:    	—
b. Share County green career paths with employees.	<b>HRS</b>	—	Capital: Current  +  Personnel:    	—
c. Support agencies to partner with community-based organizations, trade organizations, and community colleges on recruitment to broaden reach for climate and green economy jobs, in a manner informed by priority communities.	<b>HRS</b>	—	Capital: Current  +   Existing Personnel:    	 <b>Frontline Community Benefits</b>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>d. Give input to trade schools on training needs for sustainable and resilient, high-priority workforce training needs at the County, such as those related to building operations and maintenance.</p>	<p><b>GSA-HR</b>  <b>GSA-Operations</b>                      GSA-BMD                      GSA-Energy                      GSA-Logistics</p>	<p>—</p>	<p>Capital:                      Current   + </p> <p>Personnel:     </p>	<p>  <b>Community Prosperity</b>  <b>Flexible Services</b></p>
<p>e. Provide employees with training opportunities on the latest technologies and approaches to maintain County buildings and fleets.</p>	<p>GSA-BMD                      GSA-Logistics</p>	<p>GHG:    <b>County Operations</b></p>	<p>Capital:                      Current   +   </p> <p>Personnel:     </p>	<p>   <b>Flexible Services</b>  <b>Return on Investment</b></p>

## GEP 5: Growing the Alameda County Climate Workforce

**Expand County partnerships with local workforce development programs, including educational partners and employers, to support a diverse, trained, and ready workforce for climate-related career opportunities and serve as a resource for industry partners seeking to build pathways into the clean economy. Include these opportunities in County departments that administer workforce development programs.**

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Identify key local stakeholders and develop robust partnerships to support climate-related workforce development efforts.</p>	<p><b>SSA</b> GSA-OAP</p>	<p>Resilience:  Community</p>	<p>Capital: Current  +   </p> <p>Personnel:    </p>	<p> Community Prosperity Frontline Community Benefits</p>
<p>b. Encourage service providers to prioritize high-growth, climate-related employment opportunities that provide career pathways to good, family-sustaining/quality careers for diverse communities (including people of color, women, people with disabilities, youth, low-wage earners), and people with barriers to employment.</p>	<p><b>SSA</b> GSA-OAP</p>	<p>Resilience:  Community</p>	<p>Capital: Current  +   </p> <p>Personnel:    </p>	<p> Community Prosperity Frontline Community Benefits</p>
<p>c. Educate and facilitate service provider connections with training entities that enable exposure to climate-related instruction or on-the-job training, as informed by local labor market information.</p>	<p><b>SSA</b></p>	<p>Resilience:  Community</p>	<p>Capital: Current  +   </p> <p>Personnel:    </p>	<p> Community Prosperity Frontline Community Benefits</p>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>d. Increase focus on County departments that administer workforce programs to engage in matching Alameda County residents from diverse and low-income communities, as well as youth and people historically affected by systemic barriers and/or facing individual barriers to employment, with high-quality green employment opportunities, as available.</p>	<p><b>SSA</b></p>	<p>Resilience:</p>  <p>Community</p>	<p>Capital:</p> <p>Current   +   </p> <p>Existing</p> <p>Personnel:</p>    	 <p>Community Prosperity Frontline Community Benefits</p>
<p>e. Prioritize the recruitment of County residents from BIPOC and low-income communities as workers on County construction projects covered by the Countywide Project Stabilization/Community Benefits Agreement.</p>	<p><b>GSA-OAP</b></p>	<p>Resilience:</p>  <p>Community</p>	<p>Capital:</p> <p>Current   +   </p> <p>Existing</p> <p>Personnel:</p>    	 <p>Community Prosperity Frontline Community Benefits</p>

## Materials Management

### GEP 6: Developing the Regional Circular Economy

Support a circular economy based on reuse, repair, recovery, and refurbishment.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
a. Participate in a regional collaborative focused on community reuse and repair programs to increase waste diversion, reduce material consumption, and create green jobs.	<b>GSA-Sustainability</b>	GHG:  <b>Supply Chain</b>  Resilience:  <b>Community</b> <b>County Operations</b>	Capital: Current   Personnel: 	 <b>Community Prosperity</b>
b. Operate a pilot program through the County Library system for distribution of tools that support the growth of the sharing economy in the community and expand the County’s seed lending library to support home gardens.	<b>Library</b>	GHG:  <b>Supply Chain</b>  Resilience:  <b>Community</b>	Capital: Current   Personnel:  <b>Existing</b>	 <b>Frontline Community Benefits</b>

## GEP 7: Expanding Edible Food Recovery

**Strengthen infrastructure, partnerships, and in-County catering and food procurement practices for edible food recovery and reduction of food waste to reduce methane generation in landfills and encourage highest and best use of food.**

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Expand edible food recovery efforts by partnering with food banks and food rescue organizations such as the Alameda County Food Bank.</p>	<p><b>DSAL</b></p>	<p>GHG:</p>  <p>Community/Global</p> <p>Resilience:</p>  <p>Community</p>	<p>Capital:</p> <p>Current</p>  +    <p>Personnel:</p>    	  <p>Community Prosperity Health and Safety</p>

## GEP 8: Sourcing Healthier, Low-Carbon Food

Leverage the County’s purchasing power to source low-carbon and local foods in County operations in alignment with the County’s Good Food Purchasing policy in County buildings, such as detention facilities.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Through County contracting, subcontracting, and catering purchases for congregate settings, increase the purchase of produce grown and processed by local businesses to enhance the local foodshed and reduce emissions associated with distribution and transport.</p>	<p><b>SSA</b> ACSO Probation</p>	<p>GHG:    <b>Community/Global</b></p> <p>Resilience:    <b>Supply Chain</b></p>	<p>Capital:  <b>Current</b>   +   </p> <p>Personnel:     </p>	<p>   <b>Community Prosperity</b>  <b>Natural Resources Protection</b></p>

## GEP 9: Integrated Circular Food Economy

Support County farmers and a local sustainable food economy through local land use and neighborhood-based programs.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
a. Develop a plan for increasing the amount of local and regeneratively grown produce. Elements of the plan will include identifying sites with food-producing capabilities, creating a timeline to procure and convert land for agriculture production, and securing purchase or long-term lease agreements.	DSAL	Resilience:  Community	Capital: Current  +    Personnel:    	 Health and Safety Natural Resources Protection
b. Create a community-supported agriculture program to increase consumption of regeneratively grown produce.	DSAL	Resilience:  Community	Capital: Current  +    Personnel:    	 Community Prosperity Health and Safety Natural Resources Protection
c. Develop, open, and operate five new food hubs throughout the county to further expand the work of promoting regenerative agriculture, workforce development, and local food systems.	DSAL	GHG:  Community/Global  Resilience:  Community	Capital: Current  +    Personnel:    	 Community Prosperity Natural Resources Protection

## SUSTAINABLE MATERIALS MANAGEMENT MEASURES

### Technical Assistance and Outreach

SMM 1: Operational Program Implementation

SMM 2: Education and Outreach Strategy

### Circular Economy

SMM 3: Reuse Hierarchy Policy

SMM 4: Reuse and Repair Implementation

SMM 5: Zero-Waste Events

### Procurement

SMM 6: Strengthening Purchasing Policy

SMM 7: Construction and Demolition



This section covers how we will implement upstream solutions to reduce the amount of waste generated in County operations.

## Technical Assistance and Outreach

### SMM 1: Operational Program Implementation

Implement programs and projects to reduce waste generation at County facilities and manage generated waste in a sustainable manner for maximum landfill diversion.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
a. Facilitate operational changes to prevent use of unnecessary single-use disposables and promote the sustainable use of reusable, high-quality, and durable products, such as reusable dishware in food service.	GSA-Sustainability	GHG:  County Operations  Supply Chain	Capital: Current  +    Personnel:   	 Return on Investment
b. Conduct annual representative waste audits in consultation with contacts at County facilities to better understand the current waste stream to improve programs and outreach.	GSA-Sustainability	GHG:  County Operations	Capital: Current  +    Personnel:    Existing	—
c. Implement a plan to recover high-quality, edible food in current and future municipal food operations to benefit food-insecure populations, where opportunity exists to do so. Update building design guidelines to reflect capacity planning requirements for future food-generating County facilities.	GSA-Sustainability HCSA	GHG:  County Operations Resilience:  Community	Capital: Current  +    Personnel:   	 Community Prosperity Health and Safety

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>d. Expand linkages to paid employment through litter abatement programs for individuals with barriers to traditional employment, while connecting the participants to additional job training and career opportunities.</p>	<p><b>SSA</b></p>	<p>Resilience:</p>  <p><b>Community</b></p>	<p>Capital:</p> <p>Current</p>  <p>Personnel:</p> 	 <p><b>Community Prosperity</b></p>

## SMM 2: Education and Outreach Strategy

Through education and outreach, support departments to increase participation in and improve waste reduction practices in County operations.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
a. Partner with departments and agencies to incorporate targeted waste prevention practices through existing training avenues, such as building-specific training and online learning.	<b>GSA-Sustainability</b>	GHG:  County Operations Supply Chain	Capital: Current  Personnel: 	—
b. Provide technical assistance to stakeholders to support the successful adoption of department practices around the efficient consumption of materials including paper, plastic, and other commonly used items.	<b>GSA-Sustainability</b>	GHG:  County Operations Supply Chain	Capital: Current  Personnel: 	 Return on Investment

# Circular Economy

## SMM 3: Reuse Hierarchy Policy

Establish a culture of reuse through innovative policies and programs that ensure durable furniture and equipment maintain their highest and best use.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Strengthen the <a href="#">Environmentally Preferable Purchasing Resolution and Policy</a> requirements of exploring alternative options before buying new products for goods such as office or ergonomic equipment, IT equipment, and furniture. Alternative options include using recirculated goods from GSA Property and Salvage’s inventory, leasing or renting, and purchasing brand-new items with green purchasing standards. Explore if additional policy support is needed.</p>	<p><b>GSA-Sustainability</b> GSA-P&amp;S GSA-Procurement GSA-Real Property</p>	<p>GHG:  <b>Supply Chain</b></p> <p>Resilience:  <b>County Operations</b></p>	<p>Capital: Current </p> <p>Personnel: </p>	<p> <b>Return on Investment</b></p>
<p>b. Explore expanding rental and leasing programs of select furniture and other durable goods (in place of buying new) to incentivize short-term management of special/one-time use goods and equipment that meet client business needs. Develop a cost-benefit analysis mechanism to evaluate renting and leasing versus purchasing.</p>	<p><b>GSA-Sustainability</b> <b>GSA-Real Property</b> GSA-Procurement</p>	<p>GHG:  <b>Supply Chain</b></p> <p>Resilience:  <b>County Operations</b></p>	<p>Capital: Current </p> <p>Personnel: </p>	<p> <b>Return on Investment</b></p>

### SMM 4: Reuse and Repair Implementation

Foster a culture of reuse and repair in the County by developing centralized and decentralized resources to keep viable County assets in circulation.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Pilot and, if successful, expand an online, internal agency-to-agency equipment sharing system for used County furniture and equipment. If feasible, expand to invite community-based organization (CBO) vendors to participate, to spur the local reuse economy.</p>	<p><b>GSA-P&amp;S</b> GSA-Sustainability</p>	<p>GHG:  Supply Chain</p>	<p>Capital: Current  +   </p> <p>Personnel:   </p>	<p>  Flexible Services Return on Investment</p>
<p>b. Join a regional reuse network establishing a market for resale and donation of County surplus goods.</p>	<p><b>GSA-Sustainability</b></p>	<p>GHG:  Community/Global</p>	<p>Capital: Current  +   </p> <p>Personnel:   </p>	<p> Return on Investment</p>
<p>c. Implement borrowing programs of technical equipment, durable goods, and various toolkits for County use.</p>	<p><b>Library</b></p>	<p>GHG:  Community/Global</p>	<p>Capital: Current  +   </p> <p>Personnel:   </p>	<p> Return on Investment</p>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>d. Explore developing a repair job training initiative as part of a reentry program for individuals facing barriers to traditional employment.</p>	<p><b>GSA-P&amp;S</b> <b>Probation</b> GSA-Sustainability</p>	<p>GHG:  Supply Chain</p>	<p>Capital: Current </p> <p>Personnel: </p>	<p> <b>Community Prosperity</b> <b>Return on Investment</b></p>

### SMM 5: Zero-Waste Events

Provide resources and the framework so that County event planners can plan all internal and public events and meetings with zero-waste event principles.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Update the <a href="#">Green and Healthy Events and Meetings</a> program guidelines and resources to increase the ease and accessibility of hosting a zero-waste County event. Support employees to use reusable serving ware, patronize certified green businesses or small, local, and emerging businesses (SLEBs) when possible, use compostable or recyclable materials as needed, and recover leftover edible food for human consumption.</p>	<p><b>GSA-Sustainability</b></p>	<p>GHG:</p>  <p><b>County Operations Supply Chain</b></p>	<p>Capital:</p> <p>Current</p>  <p>Personnel:</p> 	 <p><b>Community Prosperity</b>  <b>Health and Safety</b>  <b>Natural Resources Protection</b></p>

# Procurement

## SMM 6: Strengthening Purchasing Policy

Develop and implement purchasing standards for high-impact product categories, in line with the Board-adopted Environmentally Preferable Purchasing Policy (R-2011-108) and the Supply Chain Sustainability Assessment reports.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Establish a directive for minimum environmental performance standards and targets for the purchase of high-priority goods, such as furniture, IT equipment, and office supplies, using sustainability standards such as recycled content or third-party certifications.</p>	<p><b>GSA-Sustainability</b> GSA-Procurement ITD</p>	<p>GHG:  Supply Chain</p>	<p>Capital: Current </p> <p>Personnel: </p>	<p> <b>Community Prosperity</b> <b>Natural Resources Protection</b></p>
<p>b. Design an approach for County vendors to source select products in cost-effective, sustainable varieties, and create demand for producers to manufacture responsibly. In doing so, the County will help build the market for these goods and practices and make them more accessible.</p>	<p><b>GSA-Sustainability</b> GSA-Procurement</p>	<p>GHG:  Community/Global Supply Chain</p>	<p>Capital: Current </p> <p>Personnel: </p>	<p> <b>Community Prosperity</b> <b>Flexible Services</b> <b>Natural Resources Protection</b></p>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>c. Continue the Countywide implementation of the Green IT Initiative, which guides sustainable IT procurement and use. Explore opportunities for source reduction through initiatives such as replacing desk phones with digital softphones, eliminating fax machines using eFax, reducing the number of printers in office spaces using multifunction devices, and expanding participation in the Information Technology Department's technology reuse program throughout the County.</p>	<p><b>ITD</b></p>	<p>GHG:</p>  <p>Supply Chain</p>	<p>Capital:</p> <p>Current</p>  <p>Personnel:</p> 	 <p><b>Community Prosperity</b>  <b>Flexible Services</b>  <b>Natural Resources Protection</b></p>

## SMM 7: Construction and Demolition

Advance circular economy principles in the built environment by diverting the maximum amount of material with a focus on salvaging for reuse during demolition and seeking opportunities to use recovered materials in new construction in project-appropriate ways.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
a. Identify project-appropriate deconstruction opportunities in facility renovation or demolition projects to promote the reuse of building materials in County facilities or other material exchange programs, supporting a regional circular economy.	<b>GSA-Capital Programs</b> GSA-Sustainability	GHG:  Supply Chain  Resilience:  County Operations	Capital: Current  +     Personnel:    	 Natural Resources Protection
b. Explore opportunities to support project-appropriate use of locally salvaged, reclaimed, refurbished, or otherwise reused building materials selection and furniture for new construction and tenant improvement projects.	<b>GSA-Capital Programs</b> <b>GSA-Sustainability</b>	GHG:  Supply Chain  Resilience:  County Operations	Capital: Current  +     Personnel:    	  Natural Resources Protection Return on Investment

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>c. Require all new construction and major capital tenant improvement projects to provide documentation that the project meets the minimum 65 percent diversion required by the State of California Green Building Code. When diverting materials, prioritize salvage and reuse of materials over recycling, where feasible.</p>	<p><b>GSA-Capital Programs</b> GSA-BMD</p>	<p>GHG:  Supply Chain</p>	<p>Capital: Current </p> <p>Personnel: </p>	<p> Natural Resources Protection</p>

## TRANSPORTATION MEASURES

### Green Fleet

- T 1: Fleet Transition
- T 2: Fleet Management
- T 3: Sustainable Fleet Practices
- T 4: Public Works Agency Fleet

### Employee Commutes

- T 5: Clean Commute Incentives
- T 6: Smart Parking Policies
- T 7: Shuttle and Bike Services
- T 8: Micromobility
- T 9: Transit Pass Program



This section covers how we will reduce greenhouse gas emissions in the County's fleet operations and employee commutes.

## Green Fleet

### T 1: Fleet Transition

Develop an electrification plan, in line with the state’s 2035 zero emission vehicle (ZEV) mandate, outlining infrastructure, budget, and behavioral strategies necessary to achieve a net-zero fleet by 2045.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
a. Transition 45 percent of the motor pool fleet to ZEVs by 2026 and 100 percent by 2031.	GSA-Logistics	GHG:  County Operations	Capital: Current  +    Personnel:     Existing	  Flexible Services Natural Resources Protection
b. Transition 15 percent of non-pursuit light-duty and off-road vehicles to ZEVs by 2026 and 100 percent by 2040.	GSA-Logistics	GHG:   County Operations	Capital: Current  +    Personnel:     Existing	   Flexible Services Health and Safety Natural Resources Protection
c. Transition 17 percent of all medium- and heavy-duty vehicles to ZEVs by 2026 and 100 percent by 2045.	GSA-Logistics	GHG:  County Operations	Capital: Current  +    Personnel:     Existing	   Flexible Services Health and Safety Natural Resources Protection

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>d. Develop charging infrastructure to meet the growing demand of fleet EVs, prioritizing expansion in highway transportation corridors.</p>	<p><b>GSA-Logistics</b></p>	<p>GHG:                        County Operations</p>	<p>Capital:                      Current                        Personnel:                        Existing</p>	<p>   <b>Flexible Services</b>  <b>Frontline Community Benefits</b>  <b>Health and Safety</b></p>
<p>e. Establish a fleet procurement hierarchy, prioritizing ZEV procurement whenever possible and hybrid vehicles if current ZEVs on the market do not meet operational needs, and consider ICE vehicles only in highly specialized cases.</p>	<p><b>GSA-Logistics</b></p>	<p>GHG:                        County Operations</p>	<p>Capital:                      Current                        Personnel:                        Existing</p>	<p>   <b>Flexible Services</b>  <b>Natural Resources Protection</b>  <b>Return on Investment</b></p>

## T 2: Fleet Management

Update fleet procurement and management policy with best practices, including state and regional priorities, supporting an equitable transition to a carbon-neutral fleet.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Create a cross-agency Sustainable Transportation Panel, as established in municipal code 3.32.200, to develop purchasing standards, review agency/departmental vehicle usage, implement the electrification plan described in T 1, and introduce initiatives to minimize the County’s environmental impact from transportation.</p>	<p><b>GSA-Logistics</b></p>	<p>GHG:                        County Operations</p> <p>Resilience:                        County Operations</p>	<p>Capital:                      Current   +   </p> <p>Personnel:                           Existing</p>	<p>  <b>Flexible Services</b>  <b>Return on Investment</b></p>
<p>b. Replace vehicles at the end of their service life with a zero emission vehicle (ZEV) provided that the ZEV alternative is a compatible replacement rightsized to perform the work duties currently demanded of the County vehicle.</p>	<p><b>GSA-Logistics</b></p>	<p>—</p>	<p>Capital:                      Current   +   </p> <p>Personnel:                           Existing</p>	<p>—</p>
<p>c. Expand remote monitoring technology, such as Geotab, ChargePoint, and GPS Insight, to all assets to collect telematic data, such as idling, usage, and driving safety.</p>	<p><b>GSA-Logistics</b></p>	<p>—</p>	<p>Capital:                      Current   +   </p> <p>Personnel:                           Existing</p>	<p>  <b>Flexible Services</b>  <b>Health and Safety</b></p>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>d. Fill the Sustainable Transportation manager role to facilitate implementing the goals outlined in these measures.</p>	<p><b>GSA-Logistics</b></p>	<p>—</p>	<p>Capital:  <b>Current</b>   +                       Personnel:    <b>Existing</b></p>	<p>  <b>Community Prosperity</b></p>
<p>e. Advocate for funds to offer a second fellowship position with GSA Logistics, increasing learning and collaboration opportunities for emerging sustainability professionals.</p>	<p><b>GSA-Logistics</b></p>	<p>—</p>	<p>Capital:  <b>Current</b>   +                       Personnel:  </p>	<p>  <b>Community Prosperity</b></p>

### T 3: Sustainable Fleet Practices

Continue to improve fleet efficiency and management.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Shift agency fleet dependency on individually assigned vehicles to common-use pool vehicles, optimizing fleet utilization and reducing operational costs and emissions.</p>	<p><b>GSA-Logistics</b></p>	<p>GHG:</p>  <p>County Operations</p>	<p>Capital:</p> <p>Current</p>  <p>Personnel:</p>  <p>Existing</p>	 <p><b>Flexible Services</b> <b>Return on Investment</b></p>
<p>b. Implement operational and maintenance best practices, such as recycled antifreeze, bulk purchasing, low-VOC materials, and continued training on electric vehicle maintenance.</p>	<p><b>GSA-Logistics</b></p>	<p>—</p>	<p>Capital:</p> <p>Current</p>  <p>Personnel:</p>  <p>Existing</p>	 <p><b>Flexible Services</b></p>
<p>c. Research new technologies for potential pilot projects, such as bilateral charging, hydrogen vehicles, and off-grid solar charging solutions.</p>	<p><b>GSA-Logistics</b></p>	<p>GHG:</p>  <p>County Operations</p>	<p>Capital:</p> <p>Current</p>  <p>Personnel:</p>  <p>Existing</p>	 <p><b>Flexible Services</b> <b>Health and Safety</b></p>

## T 4: Public Works Agency Fleet

Identify attainable emission-reduction potential in fleet operations at the Public Works Agency (PWA).

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Research and identify low-emission technology that adequately supports the highly specialized services of PWA vehicles and equipment. Implement as feasible.</p>	<p><b>GSA-Logistics</b> PWA</p>	<p>GHG:  County Operations</p>	<p>Capital: Current  +   </p> <p>Personnel:     Existing</p>	<p>  <b>Health and Safety</b> <b>Natural Resources Protection</b></p>

## Employee Commutes

### T 5: Clean Commute Incentives

**Advocate for direct monetary incentives for non-single-occupancy vehicle commutes, centering equity while expanding commute options for employees.**

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
a. Determine the feasibility of implementing a cash-per-day incentive for employees to walk, bike, or carpool to work.	<b>GSA-Logistics</b>	GHG:  County Operations	Capital: Current  +  Personnel: 	 Community Prosperity Flexible Services
b. Determine the feasibility of implementing a cash-per-month incentive to cover the costs of commuting via public transportation, vanpools, or paratransit.	<b>GSA-Logistics</b>	GHG:  County Operations	Capital: Current  +  Personnel: 	 Community Prosperity Flexible Services

## T 6: Smart Parking Policies

Determine the feasibility of additional parking policies designed to disincentivize single-occupancy commutes in internal combustion engine (ICE) vehicles.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Advance initiatives for parking policies that neutralize the cost of parking operations and use reallocated resources, such as the incentives described in T 5, to subsidize Clean Commute programs.</p>	<p><b>GSA-Logistics</b></p>	<p>GHG:                        County Operations</p>	<p>Capital:                      Current   +</p> <p>Personnel:                        Existing</p>	<p>                      Flexible Services</p>
<p>b. Designate an increasing amount of parking throughout the County for carpools, low-emission vehicles (LEV), or zero-emission vehicles (ZEV) only.</p>	<p><b>GSA-Logistics</b></p>	<p>GHG:                        County Operations</p>	<p>Capital:                      Current   +</p> <p>Personnel:  </p>	<p>                      Flexible Services</p>
<p>c. Reengage the parking buy-back program if and when County facilities return to significant in-person work to increase land-use efficiency and encourage clean commuting.</p>	<p><b>GSA-Logistics</b></p>	<p>GHG:                        County Operations</p>	<p>Capital:                      Current   +</p> <p>Personnel:  </p>	<p>                      Flexible Services</p>

## T 7: Shuttle and Bike Services

Support and expand the Clean Commute shuttle and bike service.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Investigate potential employee commuter hub areas to expand the County shuttle program focusing on first- and last-mile services.</p>	<p><b>GSA-Logistics</b></p>	<p>GHG:    <b>County Operations</b></p> <p>Resilience:    <b>Community County Operations</b></p>	<p>Capital:  <b>Current</b>  </p> <p>Personnel:    <b>Existing</b></p>	 <b>Flexible Services</b>
<p>b. Determine if expanding the shuttle program to new County facilities is justified based on potential commuter usage.</p>	<p><b>GSA-Logistics</b></p>	<p>GHG:    <b>County Operations</b></p> <p>Resilience:    <b>Community County Operations</b></p>	<p>Capital:  <b>Current</b>  </p> <p>Personnel:    <b>Existing</b></p>	 <b>Flexible Services</b>
<p>c. Reach out to County facilities likely to participate in the bike program and facilitate their entry into the program.</p>	<p><b>GSA-Logistics</b></p>	<p>GHG:    <b>County Operations</b></p>	<p>Capital:  <b>Current</b>  </p> <p>Personnel:    <b>Existing</b></p>	 <b>Flexible Services</b>

## T 8: Micromobility

Explore micromobility options for work-related business travel, including e-mobility.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Provide informational and infrastructural support to encourage active travel among employees.</p>	<p><b>GSA-Logistics</b></p>	<p>—</p>	<p>Capital:  <b>Current</b>   + </p> <p>Personnel:     </p> <p><b>Existing</b></p>	 <p><b>Flexible Services</b></p>
<p>b. Determine the cost feasibility and liability to pilot e-bikes and e-scooters for work-related purposes.</p>	<p><b>GSA-Logistics</b></p>	<p>GHG:    <b>County Operations</b></p>	<p>Capital:  <b>Current</b>   + </p> <p>Personnel:     </p> <p><b>Existing</b></p>	 <p><b>Flexible Services</b></p>

## T 9: Transit Pass Program

Expand the transit pass program to all agencies to encourage bus and rail for business travel and expand transportation demand management (TDM) services.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Promote a business-only Clipper Card access program throughout County agencies.</p>	<p><b>GSA-Logistics</b></p>	<p>GHG:    <b>County Operations</b></p> <p>Resilience:    <b>County Operations</b></p>	<p>Capital:                      Current   + </p> <p>Personnel:    </p>	<p>  <b>Flexible Services</b></p>
<p>b. Create or promote a regional ride-sharing program and encourage participation through TDMs.</p>	<p><b>GSA-Logistics</b></p>	<p>GHG:     <b>County Operations</b></p> <p>Resilience:    <b>County Operations</b></p>	<p>Capital:                      Current   + </p> <p>Personnel:    </p>	<p>  <b>Flexible Services</b></p>

## CLIMATE LEADERSHIP AND GOVERNANCE MEASURES

### Advocacy and Outreach

CLG 1: Legislative Advocacy

CLG 2: External Sharing

CLG 3: Public Outreach

### Plan Implementation

CLG 4: Visions and Strategic Plans

CLG 5: Implementation Structures

CLG 6: Implementation Resources

CLG 7: Targets

### Employee Preparedness

CLG 8: Supporting Remote Work

CLG 9: Employee Safety

CLG 10: Equipping Employees for Climate Response

### Financial Strategy

CLG 11: Investments

CLG 12: Funding Approaches



This section provides a foundation for other plan actions by creating implementation structures, addressing cross-cutting initiatives like telework, and supporting employees' resilience to climate impacts. We will also amplify other plan actions through external communications.

## Advocacy and Outreach

### CLG 1: Legislative Advocacy

**Advocate for state and federal support of carbon neutrality, climate readiness, and equity-promoting solutions—such as through the County legislative platform and priorities—to accelerate climate action and gain resources for local action.**

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
a. Support state building policies that align with carbon neutrality. Advocate for state and federal policies that support product stewardship programs, right to repair, and other policies supporting sustainable materials management.	<b>GSA-Sustainability</b> CAO	GHG:  Community/Global	Capital: Current  Personnel: 	 <b>Community Prosperity</b> <b>Natural Resources Protection</b>
b. Advocate at state and federal levels for resources for communities most affected by climate impacts and the local governments that serve them, and advocate that climate solutions be co-created with communities.	<b>GSA-Sustainability</b> CAO	GHG:  Community/Global	Capital: Current  Personnel: 	 <b>Frontline Community Benefits</b>

## CLG 2: External Sharing

Share lessons learned externally to help amplify benefits of action and gain support for local and regional efforts.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Share lessons and exchange information with other organizations through publishing case studies, speaking at conferences, and contributing to research in the field.</p>	<p><b>GSA-Sustainability</b></p>	<p>—</p>	<p>Capital:  <b>Current</b>   + </p> <p>Personnel:  </p>	<p>—</p>
<p>b. Continue to host green purchasing roundtable meetings to support cities and other public jurisdictions within Alameda County to advance sustainable purchasing in line with climate action goals.</p>	<p><b>GSA-Sustainability</b></p>	<p>—</p>	<p>Capital:  <b>Current</b>   + </p> <p>Personnel:    <b>Existing</b></p>	<p>—</p>
<p>c. Communicate to potential employment applicants that climate action is part of the purposeful work done by County employees</p>	<p><b>HRS</b></p>	<p>—</p>	<p>Capital:  <b>Current</b>   + </p> <p>Personnel:  </p>	<p>—</p>

### CLG 3: Public Outreach

Encourage public climate action through available resources and channels when sharing plan updates.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Use channels such as websites, social media, newsletters, public spaces (e.g., County facilities where the public visits), and existing community group partnerships to inform local residents of the County’s climate action process. In addition, share information on city and unincorporated community climate action plans and steps the public can take.</p>	<p><b>GSA-Sustainability</b> CAO</p>	<p>GHG:  <b>Community/Global</b></p> <p>Resilience:  <b>Community</b></p>	<p>Capital: Current  +   </p> <p>Personnel:    </p>	<p>—</p>

## Plan Implementation

### CLG 4: Visions and Strategic Plans

**Incorporate climate action and resilience in County visioning processes, to weave climate goals into budgets and strategic planning throughout the organization.**

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
a. Add carbon neutrality and climate resilience to the County’s Vision 2026 and to the strategic plans of County agencies.	<b>CAO</b> <b>GSA-Sustainability</b>	—	Capital: <b>Current</b>  Personnel: 	—
b. Include plans for climate impacts when agencies update their continuity of operations plans.	<b>All agencies</b>	Resilience:  <b>County Operations</b>	Capital: <b>Current</b>  Personnel: 	 <b>Flexible Services</b>
c. Explore opportunities to advance climate action through District Attorney services.	<b>District Attorney</b> GSA-Sustainability	—	Capital: <b>Current</b>  Personnel: 	—

## CLG 5: Implementation Structures

**Establish an accountability structure to support successful implementation of the GOCAP. Update this structure when needed to better support staff implementing the GOCAP.**

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Convene in action area or project groups regularly to coordinate. Convene key agency staff in a cross-agency group at least annually to report on progress and identify areas where further coordination or resources are needed. Explore establishing a small group of interested department heads to preview the annual report and to support working groups that need cross-agency executive involvement or guidance.</p>	<p><b>GSA-Sustainability</b></p>	<p>—</p>	<p>Capital:  <b>Current</b>   +   <b>Existing</b></p> <p>Personnel:    <b>Existing</b></p>	<p>—</p>
<p>b. Share an update with the Board of Supervisors and agency/department heads every year or two at a Board retreat or other designated time. Share an update with all County employees annually on accomplishments and how they can engage.</p>	<p><b>GSA-Sustainability</b></p>	<p>—</p>	<p>Capital:  <b>Current</b>   +   <b>Existing</b></p> <p>Personnel:    <b>Existing</b></p>	<p>—</p>

## CLG 6: Implementation Resources

Establish technical assistance resources for agencies, to enable rapid response to climate issues and support for frontline communities.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Identify resources to help project teams find likely grant opportunities. Explore expanding project staff access to grant-writing resources, such as grant writers, and training to improve their ability to access grant funding for climate projects. Examine the potential benefit of a dedicated grant writer and administrator.</p>	<p><b>GSA-Sustainability</b></p>	<p>—</p>	<p>Capital:  <b>Current</b>   + </p> <p>Personnel:  </p>	<p>—</p>
<p>b. Share resources and training about equitable community engagement with County staff leading project implementation.</p>	<p><b>GSA-Sustainability</b></p>	<p>—</p>	<p>Capital:  <b>Current</b>   + </p> <p>Personnel:  </p>	<p>  <b>Frontline Community Benefits</b></p>
<p>c. Based on feedback during plan implementation, establish resources, such as on-call contracts or fellows, to assist agencies to implement plan actions, including preparing for and responding to climate hazards, implementing adaptation measures, and reducing greenhouse gas emissions.</p>	<p><b>GSA-Sustainability</b></p>	<p>Resilience:    <b>County Operations</b></p>	<p>Capital:  <b>Current</b>   + </p> <p>Personnel:  </p>	<p>—</p>

## CLG 7: Targets

**Incorporate metrics and methods to track our progress on carbon reduction and resilience goals in a four-year time frame. Track progress toward the 2045 carbon neutrality goal.**

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Engage climate action project leads in setting measurable, motivating metrics and reporting on project-specific metrics.</p>	<p><b>GSA-Sustainability</b></p>	<p>—</p>	<p>Capital:                      Current   + </p> <p>Personnel:  </p>	<p>—</p>
<p>b. Establish a process for gathering data for annual progress reporting. Explore opportunities to centralize frequently used data.</p>	<p><b>GSA-Sustainability</b></p>	<p>—</p>	<p>Capital:                      Current   + </p> <p>Personnel:  </p>	<p>—</p>

## Employee Preparedness

### CLG 8: Supporting Remote Work

**Support broad participation in telework to reduce commute and building emissions, using lessons learned from emergency teleworking. Support interested agencies in setting agency-level goals and frameworks, and consider setting an organization-wide teleworking goal in alignment with state and regional commute reduction goals and goals of leading state and local government employers.**

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
a. Create and promote materials and training on effective telework protocols, communication, collaboration, and cybersecurity awareness.	<b>HRS</b> <b>ITD</b>	GHG:  County Operations	Capital: Current  +    Personnel:    	 Flexible Services
b. Support agencies to identify and address barriers to field work and telework, such as equipment, job-specific software, or digital file access, to enable County employees within appropriate job classifications to work from anywhere and to expand public access to digital services. Support agencies to consider a range of individual circumstances when designing programs, to support productive, safe telework for employees in different situations.	<b>GSA-Sustainability</b> <b>ITD</b>	GHG:   County Operations	Capital: Current  +    Personnel:    	 Flexible Services

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>c. Support departmental telework programs through surveys or similar methods to assess participation and opportunities for improvement. Identify opportunities to support employees who cannot telework, such as with commute benefits.</p>	<p><b>GSA-Sustainability</b> GSA-Logistics</p>	<p>GHG:  County Operations</p>	<p>Capital: Current  +   </p> <p>Personnel:    </p>	<p>—</p>
<p>d. Add a telework time code to the time reporting system to track telework hours. Gather and review data to report on participation and trends.</p>	<p><b>Auditor</b> <b>GSA-Sustainability</b> HRS</p>	<p>—</p>	<p>Capital: Current  +   </p> <p>Personnel:     Existing</p>	<p>—</p>

## CLG 9: Employee Safety

**Integrate employee safety from climate shocks at work and support for personal impacts of climate emergencies into safety and health programs and resources, such as workplace safety guidelines and training (e.g., recognizing signs of heat-related illness, emergency telework), household preparedness, and mental health resources to support employee resilience.**

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
a. Create template messages for GSA divisions to inform employees about how they can protect themselves from hazardous air quality, in alignment with the Air Quality Employee Protection Policy.	<b>GSA-Sustainability</b> GSA	Resilience:  County Operations	Capital: Current  +    Personnel:    	—
b. Support developing two-way communication channels to share advisories with GSA employees, including frontline outdoor, garage, and warehouse workers, before and during climate shocks, such as hazardous air quality, to increase safety and preparedness.	<b>GSA-Sustainability</b> GSA	Resilience:  County Operations	Capital: Current  +    Personnel:    	  <b>Frontline Community Benefits</b> Health and Safety
c. Share resources and deliver training to GSA employees on climate emergency and disaster preparedness to support their personal preparedness and ability to deliver services post-disaster.	<b>GSA-Sustainability</b> GSA	Resilience:  County Operations	Capital: Current  +    Personnel:    	 <b>Health and Safety</b>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>d. Promote the Employee Assistance Program, an existing wellness program that can support employees in challenging situations, to GSA employees, to increase their resilience to climate impacts. Take steps to reach the most affected or hard-to-reach employee groups, such as outdoor workers, Temporary Assistance Program (TAP) employees, and employees who work without a computer.</p>	<p><b>GSA-Sustainability</b> GSA</p>	<p>Resilience:  <b>County Operations</b></p>	<p>Capital: <b>Current</b>  +   </p> <p>Personnel:    </p>	<p> <b>Frontline Community Benefits</b> <b>Health and Safety</b></p>
<p>e. Add air quality sensors at key County campuses for more frequent data on air quality.</p>	<p><b>GSA-Sustainability</b> GSA</p>	<p>Resilience:  <b>County Operations</b></p>	<p>Capital: <b>Current</b>  +   </p> <p>Personnel:    </p>	<p> <b>Flexible Services</b></p>

## CLG 10: Equipping Employees for Climate Response

**Train and hear from employees in relevant roles on how climate impacts are affecting the community, to identify and respond to key impacts.**

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Survey employees on how climate impacts are affecting community residents who are clients of County programs. Share information with community-facing employees on how climate impacts affect residents.</p>	<p><b>GSA-Sustainability</b></p>	<p>Resilience:</p>  <p><b>Community</b> <b>County Operations</b></p>	<p>Capital:</p> <p>Current  +   </p> <p>Personnel:</p>    	 <p><b>Frontline Community Benefits</b></p>
<p>b. Support employees to take relevant on-the-job training as new issues arise (e.g., smoke and air quality, fire-prevention design, heat-related illness).</p>	<p><b>GSA-Sustainability</b></p>	<p>Resilience:</p>  <p><b>County Operations</b></p>	<p>Capital:</p> <p>Current  +   </p> <p>Personnel:</p>    	 <p><b>Health and Safety</b></p>

## Financial Strategy

### CLG 11: Investments

Manage investment holdings and other holdings to guard against climate risk and benefit from a just transition to a carbon-free economy.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Continue to implement the Alameda County Employees' Retirement Association's (ACERA) Environmental, Social, and Governance (ESG) Investment Policy, including through proxy votes. Encourage ACERA to become a signatory to the Principles for Responsible Investment and to join the Ceres Investor Network on Climate Risk and Sustainability to encourage companies to address the full scope of ESG issues.</p>	<p><b>Treasurer</b></p>	<p>GHG:</p>  <p>Community/Global</p>	<p>Capital:</p> <p>Current Existing</p>  <p>Personnel:</p>  <p>Existing</p>	 <p>Community Prosperity</p>
<p>b. Provide annual reports on County Treasurer's Office sustainable investment activities, as required of signatories of the Principles for Responsible Investment.</p>	<p><b>GSA-Sustainability</b></p>	<p>—</p>	<p>Capital:</p> <p>Current Existing</p>  <p>Personnel:</p>  <p>Existing</p>	 <p>Community Prosperity</p>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>c. Develop an approach to measure our performance in incorporating ESG factors in the investment analysis and decision-making process for the Treasurer’s investment pool.</p>	<p><b>Treasurer</b></p>	<p>GHG:                        Community/Global</p>	<p>Capital:                      Current   +                         Existing                      Personnel:                           Existing</p>	<p>                      Community Prosperity</p>
<p>d. Continue to increase the proportion of Treasurer’s investment pool deposits in community banks or local financial institutions. Explore methods to track and report on the impact of investing locally. Explore ways to include transformational local climate investments that benefit frontline communities.</p>	<p><b>Treasurer</b></p>	<p>GHG:                        Community/Global</p>	<p>Capital:                      Current   +                         Existing                      Personnel:                           Existing</p>	<p>                       Community Prosperity                      Frontline Community Benefits</p>
<p>e. Increase awareness of the current ESG options in the 457(b) Deferred Compensation Plan by publicizing them to employees. Explore opportunities to expand ESG options in the plan, such as by adding a target date ESG fund or benchmarking existing funds.</p>	<p><b>Treasurer</b></p>	<p>GHG:                         Community/Global</p>	<p>Capital:                      Current   +                         Existing                      Personnel:                           Existing</p>	<p>                      Community Prosperity</p>

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>f. Explore transferring tax-defaulted vacant properties that are unfit for housing or urban agriculture to nonprofits or public agencies for carbon storage projects, such as tree planting.</p>	<p><b>Treasurer</b></p>	<p>GHG:</p>  <p><b>Community/Global</b></p> <p>Resilience:</p>  <p><b>Community</b></p>	<p>Capital:</p> <p><b>Current</b></p>  <p><b>Existing</b></p> <p>+   </p> <p>Personnel:</p>     <p><b>Existing</b></p>	 <p><b>Natural Resources Protection</b></p>

## CLG 12: Funding Approaches

Explore innovative approaches to fund climate action and resilience—such as internal carbon pricing, a revolving fund, a donations fund, grants, fees, or green bonds—in a manner that does not unfairly financially burden small businesses or low-income communities.

Submeasure	Key Departments	Priority Climate Action Benefits	Investment Needed	Co-benefits
<p>a. Identify grant funding or no-interest loans or pursue other approaches to reduce up-front capital needs for upgrades to County facilities (as recommended in the Built Environment section), prioritizing facilities that are providing critical services in frontline communities.</p>	<p><b>GSA-Sustainability</b></p>	<p>—</p>	<p>Capital: Current</p>  <p>Personnel:</p> 	 <p><b>Frontline Community Benefits</b> <b>Return on Investment</b></p>

## Appendix D

# Outcomes of 2010 Climate Action Plan

## Climate Leadership for a Healthy Future: Report on the Outcomes of the Alameda County Climate Action Plan for Government Services and Operations Through 2020

*(August 2021)*

### Introduction

Since the [Alameda County Climate Action Plan for Government Services and Operations Through 2020](#) was adopted in 2010, we have dramatically reduced our greenhouse gas emissions by changing how we do business. In doing so, we have also improved services for our residents and the quality of life of our communities. The plan provided a path to achieve climate action successes by outlining areas for us to focus our efforts and detailing why change was necessary.

But as with every plan, not everything happened how we initially expected it would. We adapted the plan and refocused some of our efforts in response. We applied lessons learned to the next plan.



**Watch this short video** on Alameda County's climate initiatives and leadership since 2010, including the creation of the first climate action plan process.

To view videos about the past 10 years of climate action, please visit our [YouTube playlist](#).

## About the Plan

We created the plan in response to the severe climate change challenges facing Alameda County and its residents. In 2010, many cities and counties were evaluating and taking steps to reduce their greenhouse gas emissions. Our plan development capitalized on that momentum. To ensure the plan would work for our 20 different agencies, we developed it through a collaborative process, with internal subject matter experts generating and considering ideas, and all agencies reviewing drafts along the way.

The plan set ambitious short- and long-term goals: reductions in greenhouse gas emissions from 2003 levels of 15 to 30 percent by 2020 and 80 percent by 2050. It identified six categories for action and a total of 80 measures, or recommended projects and initiatives, within them:

- Built Environment
- Transportation
- Solid Waste
- Cross-Cutting Strategies
- Beyond Reductions
- Climate Protection Leadership

With 80 measures to tackle, we needed to give staff who would implement the plan guidance on where to begin. The General Services Agency Office of Sustainability, which facilitated plan development, prioritized each measure



*General Services Agency employees collaborated with employees from all County agencies on climate action in areas including buildings, energy, transportation, and waste reduction.*

based on a series of criteria, including anticipated emission reductions and other benefits (such as saving the County money), efficient use of financial and staff resources, and ease of implementation.

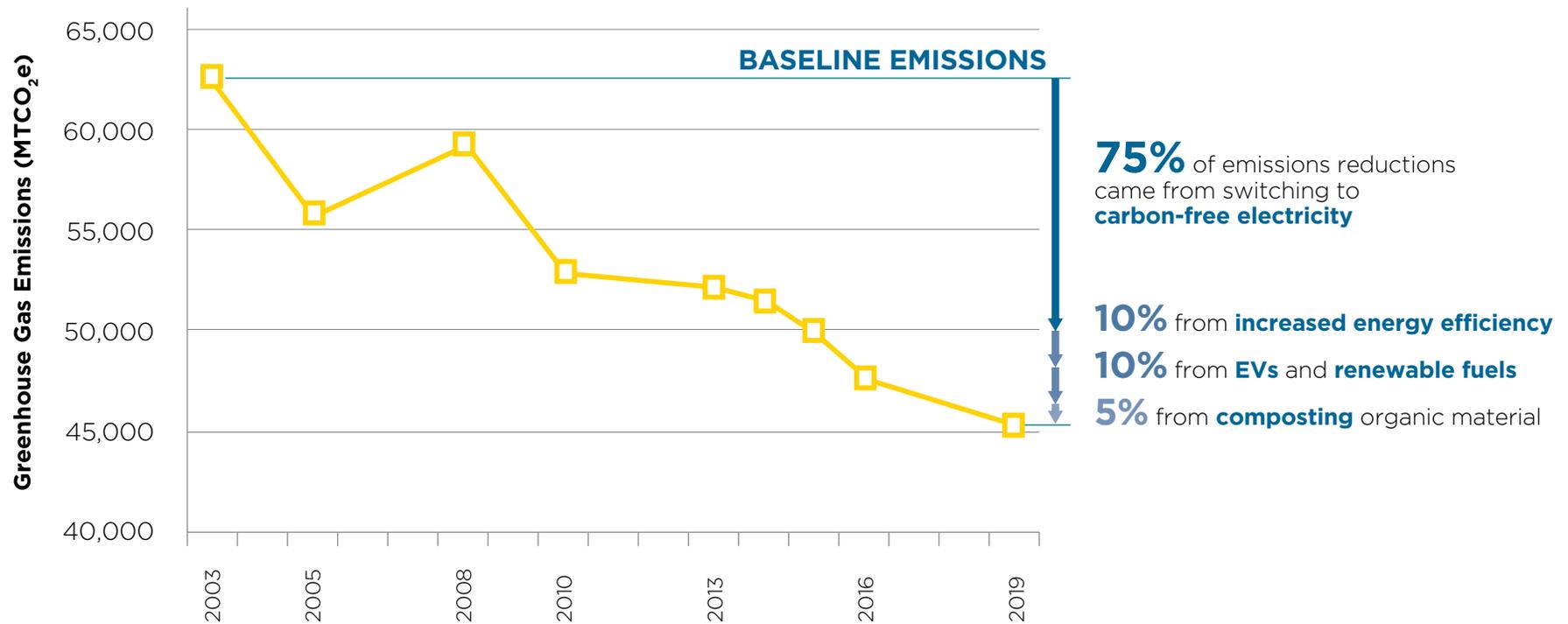
## Our Accomplishments

By 2016, we had reduced annual operational greenhouse gas emissions by 15 percent from 2003 levels. In 2019, these emissions decreased by 31 percent, meeting our short-term “reach” goal and giving us a strong start at achieving our long-term goal for 2050. The projects that

achieved this also provided benefits for residents, including online accesses to services, cleaner air, and healthier places for community members to spend time.

We made big steps forward in each of the six action areas.

**Greenhouse gas emission reductions from 2003 baseline**



## Built Environment

At the time the plan was written, our buildings and facilities accounted for nearly half of our emissions. Measures in this area were designed to decrease emissions by reducing the energy and fuel County buildings and equipment used and the electricity needed to run street and traffic light systems and water systems.

To help meet these goals, we began designing and building all new buildings to meet green certification standards. Twelve of our buildings, from libraries to fire stations, now have at least a U.S. Green Building Council LEED® (Leadership in Energy and Environmental Design) Silver designation, with seven rated Gold or better. These buildings provide a healthy indoor environment for both employees and visitors and, as an added benefit, save taxpayer money through reduced energy and water use.

As of 2020, on-site solar generation provided about 16



*The County's San Lorenzo Library is a LEED Silver building.*

percent of the electricity needed to power our buildings. The rest comes from carbon-free sources purchased from East Bay Community Energy, the public power agency we launched in 2018. Together, these changes brought

**Buildings built or renovated during the plan period were LEED® certified under LEED rating systems for New Construction (NC), Commercial Interiors (CI), or Existing Buildings (EB).**

2021 LEED NC Gold Certification: Cherryland Community Center  
 2020 LEED CI Gold Certification: Information Technology Department 13th Street Headquarters Renovation  
 2018 LEED NC Silver Certification: 1111 Jackson Street Renovation  
 2018 LEED NC Silver Certification: San Lorenzo Library  
 2017 LEED NC Silver Certification: East County Hall of Justice  
 2017 LEED NC Silver Certification: Cherryland Fire Station  
 2017 LEED EB Silver Certification: Peralta Oaks (Coroner's Bureau, Crime Lab, and Public Health Lab)  
 2016 LEED NC Gold Certification: Highland Hospital Acute Care Tower  
 2016 LEED NC Gold Certification: Highland Care Pavilion  
 2013 LEED NC Platinum Certification: Ashland Youth Center  
 2011 LEED NC Gold Certification: Castro Valley Library

electricity-related emissions from our owned facilities to zero—a dramatic reduction in one of our highest emissions sources from when we began counting.

## Transportation

Measures here focused on reducing emissions from employee commuting and work travel by making motorized travel greener, encouraging nonmotorized travel, and promoting virtual meetings and remote work.

Transportation infrastructure updates have helped our employees and the community get around more efficiently and sustainably. We added 83 all-electric vehicles (EVs) to our fleet. Our employees have access to 396 EVs and hybrid-electric vehicles for on-the-job travel. Clean vehicles were nearly one-third of the fleet as of 2019. We also encourage the public to use EVs by providing convenient charging stations.

We added a bike fleet for employees to check out for on-the-job travel. We also added new bike racks at a number of County buildings.

To reduce pollution from their commutes and on-the-job travel, our staff held many more virtual meetings, such as through Microsoft Teams, and worked remotely. This helped prepare the County to more swiftly adopt the widespread telework needed in 2020 at the start of the COVID-19 pandemic. In a 2021 commuter survey, 62 percent of respondents reported having teleworked regularly since March 2020.



By 2019, the County had installed over 150 EV charging stations, with 106 available to the public.

**Find stations using the U.S. Department of Energy [Alternative Fueling Station Locator](#).**

## Solid Waste

The plan highlighted two strategies for achieving a reduction in solid waste: promoting waste prevention and diversion at County facilities and reducing paper use. At the time, discarded paper towels were nearly half the volume of the County's office building landfill waste.

Nearly all of our more than 150 County facilities had recycling and composting in place by 2020. Our nationally recognized paper reduction policy decreased white office paper purchases by one-third from 2010 to 2019. By 2021, we had reduced purchases by 58 percent. Additionally, our Property and Salvage department saves taxpayer money by reusing, recycling, or selling office equipment.

**8,500 tons of metal and paper** was diverted by Property and Salvage from 2010 through 2020.

**Over \$340,000 of revenue** was generated from recycling and reuse sales (including vehicle auctions) in 2020.



## Cross-Cutting Strategies

These measures targeted areas with more than one source of greenhouse gases and helped make possible emissions reductions in other areas.

In key areas of purchasing, our green purchasing efforts helped us reduce waste and conserve energy. The vast majority of white office paper purchased is made from 100 percent post-consumer recycled content. Switching from separate printers and processors to multifunction devices reduced our environmental footprint and promotes digitization. As of 2019, 93 percent of the cleaning products Alameda County buys carry a verified ecolabel. The County specifies carpet that contains recycled content and that minimizes off-gassing.

## Our actions on paper between 2010 and 2019 reduced greenhouse gas emissions equivalent to taking 420 cars off the road for one year.

(Calculations made using the Environmental Paper Network's Paper Calculator Version 4.0.)

The County is proud to support local green businesses. Between 2011 and 2018, we doubled the share of print services we buy from Certified Green Businesses.

We also digitized our processes. Residents can now access many online services that would once require paper or a trip to a County office. They order copies of vital records, apply for food stamps and Medi-Cal, and make payments for services online.

In another example, we designed and launched a paperless process for social workers to assist residents to apply for in-home supportive services for adults and older adults, giving social workers more time to spend with clients rather than entering digitally available information and scanning paperwork. We also replaced the County's mailed

paper contracts with electronically signed ones, including the contracts to confirm polling sites, enabling earlier confirmation. These types of initiatives reduced paper use and vehicle emissions.

### **Beyond Reductions**

The plan did not solely focus on reducing greenhouse gas emissions. It also included goals to help communities prepare for climate change disruptions and promote carbon capture and storage through our natural ecosystems.

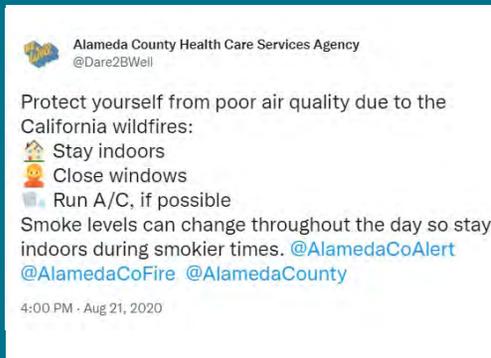
We started programs to preserve trees in unincorporated communities and promote plantings, including trees, along roads we maintain. Our creek restoration projects have helped capture and store carbon by replacing concrete with native plant species.



We have taken steps to help community members decrease their exposure to wildfire smoke and to stay safe during heat waves and power shutoffs. For example, we developed tailored health and safety tips for smoke, heat, and fire conditions, coordinating across agencies and platforms to share web and social media guidance in the six most commonly used languages in Alameda County. We also developed a [heat vulnerability map](#) showing which communities are most likely to be affected by extreme weather.

We engaged residents and staff in our three-year [Cooling Our Communities](#) program, which helped residents in the heat-vulnerable unincorporated communities of Ashland, Cherryland, and Hayward Acres become more resilient to higher temperatures from climate change. As part of the program, volunteer Cooling Ambassadors from these communities reached out to their neighbors to provide information on heat preparedness and a free shade-providing tree program.

**The Alameda County Health Care Services Agency shares climate protective action information on Twitter as @Dare2BWell. Some examples are below, in both English and Spanish.**



Approximately 1,000 people were engaged in the **Cooling Our Communities** program, and over 315 trees were planted.

The **Heat Vulnerability Map** has been viewed about 2,000 times in 2020 and 2021.

As climate adaptation became more of a focus, the County played a key role in developing the [Bay Area Climate Adaptation Network](#) (BayCAN) and [Coastal Hazards Adaptation and Resiliency Group](#) (CHARG), two regional collaboratives facilitating increased coordination of local government staff on issues such as extreme heat and sea level rise.

### Climate Protection Leadership

We formed a cross-agency climate executive committee to oversee plan implementation. We developed indicators to track progress and conducted periodic inventories of our greenhouse gas emissions to ensure we were on track.

Understanding the critical effects that climate change could have on global markets, and how investments can



steer markets to build a sustainable future, we worked with our pension fund to include environmental factors for consideration when evaluating investments.

We knew that our reducing emissions from government services and operations alone would not stop climate change. However, we could inspire broad change that would make a difference by serving as a model for other organizations.

To that end, we fostered local and regional partnerships. We supported local cities on sustainable procurement, holding educational roundtables and coordinating regional procurements. We founded the nation's first [Green Child Care Program](#) to support childcare and preschool programs to operate sustainably and foster the next generation of environmental stewards. The program



reached more than 1,200 staff and teachers and over 6,270 children in eight years. We led a regional electric vehicle collaborative that jumpstarted EV usage and charging station installation across the Bay Area.

We supported Strategic Energy Innovation's initial efforts to start the [Climate Corps Fellowship Program](#) to train the next leaders in climate change work and were one of the first partner sites for fellows. Between 2010 and 2021, we hosted [62 Climate Corps](#) fellows to work on climate projects for 10-month service terms; 90 percent have gone on to public service, environmental careers, or graduate school. Two other programs modeled on Climate Corps have since been started in California.

We have received more than 80 national, state, and local awards recognizing our work on climate action.

### **Climate and Sustainability awards received by Alameda County:**

2020 EPA recognition as a top 30 local government green power partner

2020 California State Association of Counties (CSAC) award for smoke response

2019 CSAC award for climate resilience workshops

2019 Beacon award for sustainability

2018 CSAC award for regional procurement coordination

2017 CSAC award for training fellows

2015 National Association of Counties (NACo) award for a regional local government EV fleet project

2015 NACo award for our Green Child Care Program

12 years of recognition as one of the 100 best fleets and top government green fleets in North America

Four outstanding case study awards and two leadership awards from the Sustainable Purchasing Leadership Council

The County is recognized as a national leader. We are often invited to present about our programs to other local governments and have encouraged other counties to get involved in climate coalitions such as [Cool Counties](#) and [We Are Still In](#).

## How We Achieved These Accomplishments

Over the 10 years of plan implementation, staff in areas such as buildings, information technology, public health, vehicles, emergency services, and materials reuse implemented measures that aligned with their roles. They integrated these into the existing County functions and achieved many of the accomplishments highlighted previously. The Office of Sustainability provided technical assistance or connected program leads to resources such as interns or grant funding, as well as reported on and promoted the work being done.

We soon realized that measures in the plan without clear ownership, such as clean commuting or paper reduction, would require coordination by the Office of Sustainability to ensure they were implemented. Tackling these was done in three phases.

In the first phase (2010 to 2014), we established a climate executive committee of agency directors chaired by the County Administrator. The Office of Sustainability worked with the members of the executive committee to get their input on which measures from a narrowed set of options to advance, given their limited availability. The executive committee selected specific measures and sponsored cross-agency teams to execute them.

Two rounds of cross-agency teams then focused on measures targeting our major emissions sources:

More than 260 employees became **Green Champions**, a leadership role in supporting the programs designed by the cross-agency teams.

Approximately 700 employees have subscribed to a listserv to get **regular sustainability updates and opportunities** to tell their peers how to get involved.

preventing waste, reducing energy use, reducing fuel use on the job, and commuting. The Office of Sustainability guided and assisted the teams, with Climate Corps fellows providing supporting research.

The second phase (2015 to 2016) focused on promoting widespread adoption of the initiatives developed by the cross-agency teams. More than 60 employees served on these teams. We held a summit in 2015 where team members and other champions shared ideas to expand the programs into their agencies. In 2015, the Office of Sustainability also met with each agency director to

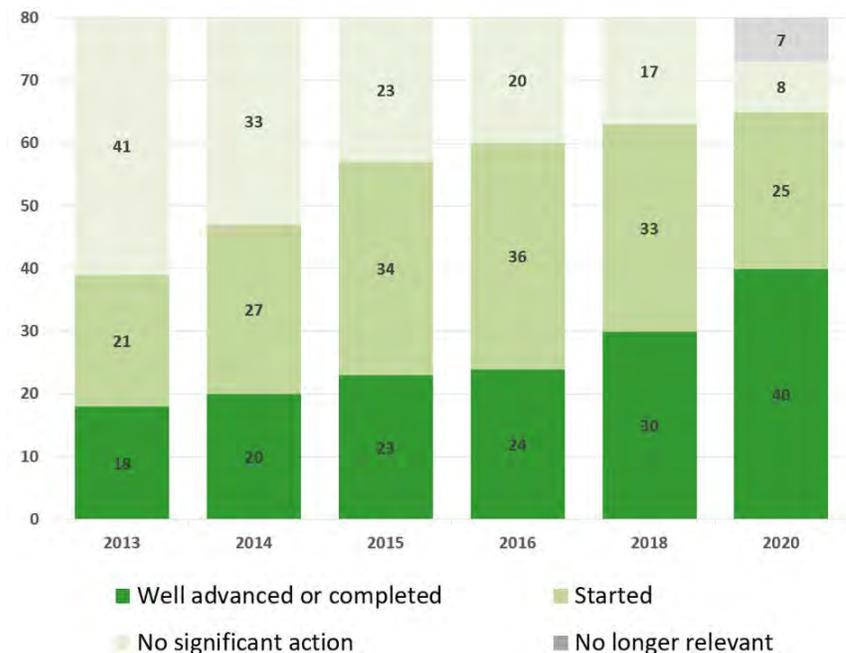
share a “report card” of how their agency was doing at implementing team initiatives such as paper reduction or clean commuting.

GSA Sustainability Office and [Clean Commute Program](#) staff led employee outreach campaigns to share the programs developed by the teams. For example, Green and Healthy Events certification was developed by one team. Employees who follow a series of guidelines, such as reducing paper handouts and serving healthy foods, can certify events they organize. During a six-week competition in 2015, we used a social marketing approach to encourage employees to certify events as Green and Healthy and held an awards ceremony to recognize leaders. The Community Commutes Day outreach campaign in 2016 was a competition among departmental teams that incentivized employees to share helpful clean commute information and resources with one another. More than 700 employees participated.

In the third phase, we added work on climate resilience measures, including those described in the Beyond Reductions section. This phase began in 2017 with internal research and identifying departments ready to act. Next, the Office of Sustainability coordinated with these departments and held [adaptation workshops](#) starting in 2018. In 2019, we built on those workshops through grant-funded projects, including development of cross-agency coordination tools for wildfire smoke, Cooling Our Communities, and the heat vulnerability map. We received nearly \$200,000 in state and private grant funds for these projects.

As implementation of the plan began, we learned that some measures were better investments of our time and resources than others. Figuring this out necessarily involved leadership and staff from across the County and establishing cross-agency coordination. We soon learned it was also important to celebrate those who participated in sustainability initiatives.

We made steady progress over the decade to achieve the greenhouse gas reduction goal. We anticipated in 2010 that not all measures would be implemented by 2020, as technology and circumstances would change. Of the 80 measures in the plan, significant progress was made on most of the measures that remained relevant, as shown in the following chart.



## What We Learned

We learned several lessons throughout the process of implementing the plan.

- 1 **Engage partners at all levels of decision-making and be sure to link to their existing goals and priorities.** After gaining crucial executive-level support, we expanded our scope to other high-ranking agency staff to serve as agency climate coordinators, mid-level staff as team leads, and additional staff as team members. We also reached out more broadly to all employees to solicit suggestions. Being as inclusive as possible was the best way to demonstrate that sustainability is everyone's responsibility and to ensure approvals and implementation, both of which are crucial to accomplishing our goals.
- 2 **Connect players across the organization.** Because siloed decision-making can hamper widespread adoption of proven sustainability actions, sharing models between agencies helps multiply the impact of successes. Jumpstart change by running a pilot, which can convey benefits better than a report and win allies. Combat the notion that it is not "someone else's job" by bringing players into the same room to achieve shared goals by divvying up the work appropriately.
- 3 **Consider where efforts will make the biggest difference.** For example, getting people to change their behavior can be time consuming, so a focus on systemic changes may reap bigger rewards. Installing occupancy sensors may be easier than training many people to turn off lights.

- 4 **Be nimble and responsive to new opportunities.** Ultimately, many of our greenhouse gas reductions came from switching to 100 percent carbon-free electricity through East Bay Community Energy, a public power agency launched by the County in 2018. This was not a planned initiative, but it made a huge difference.

Linking activities with local events can also create momentum, such as launching a climate preparedness effort quickly after a climate-related emergency has affected a region.

- 5 **When leading behavior change and outreach efforts, select ones that will inspire employees and offer a chance to find champions.** Listen thoughtfully to identify barriers to action—whether real or perceived—and work to remove them. Regularly track and share behavior change data during the efforts to keep your audience motivated. Show that their small actions make a difference, and use messengers they trust.

Structure strategic ways to use champions: get enthusiastic participants all pulling in the same direction. Assess what actions will have the most impact, and invite cheerleaders to participate, rather than investing in many smaller pet projects.

- 6 **Use tools from other fields, such as user-centered design, social marketing, and art and filmmaking, to help create change.**

## Developing the Next Plan

As we began work on the [next climate action plan](#), the political, social, and physical environments had changed dramatically. The United States was again participating in the Paris Agreement and the federal government was showing strong climate leadership, including a focus on climate equity and a new federal target to reduce emissions 50 percent by 2030 from 2005 levels. California's goals of carbon neutrality by 2045 and a 40 percent reduction in emissions from 1990 levels by 2030 show the state's increased commitment.

The mandate for change is even clearer now than it was in 2010. [According to NASA climate data](#), the seven most recent years have been the warmest recorded, and heat waves and other extreme weather events are becoming ever more common. In California, the wildfire season starts earlier and covers more of the state. Six of the largest wildfires in the state's history have been in the last three years, [according to CalFire records](#).

COVID-19 brought into stark relief the racial, ethnic, and economic disparities in our society. Just as the pandemic disproportionately harmed people of color and low-income neighborhoods, they have and will continue to disproportionately feel the effects of climate change. Often, they have fewer resources to cope.

Moving forward, we must promote equitable economic recovery for these communities. Our economy must become even more green, and, as part of our responsibility

to our residents, we need to help these communities build resilience to climate disruptions.

The new plan, which will be co-developed with staff across County agencies and incorporate input from targeted community engagement efforts and broader County-wide events, will seek to

- 1 **reimagine operations and services to increase efficiency, equity, and access;**
- 2 **prioritize the voices of communities affected most by climate-related disruptions and support their health and well-being during these disruptions;** and
- 3 **advance sustainable prosperity for all.**

We expect to also accelerate our movement away from fossil fuels by expanding use of EVs and electricity for heating and cooling our buildings. We plan to continue remote work options after the pandemic to reduce emissions from commuting.

By developing and implementing actions in each of these focus areas, the plan will help ensure we meet our [Vision 2026](#) goals, including a healthy environment, a thriving and resilient population, and a prosperous and vibrant economy.

## For More Information

Visit our [website](#) to learn more. To view videos about the past 10 years of climate action, please visit our [YouTube playlist](#).