



City of Foster City

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# Climate Action Plan

2024 Update

November 2024





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### Thank you!

In addition to the Foster City community who took the time to participate in the Climate Action Plan (CAP) community outreach process to share their experiences and priorities with us, we would also like to thank external stakeholders and non-profit organizations who provided additional guidance, support, feedback, and content throughout the development and adoption process. Their oversight was invaluable to the creation of this CAP and will continue to be instrumental throughout its implementation.

This Climate Action Plan was developed using sections from the Regionally Integrated Climate Action Planning Suite (RICAPS) template and climate action planning tools.



Additional technical assistance was provided by Rincon Consultants, Inc.

### Disclaimer

This Climate Action Plan outlines general policies aimed at equitable climate action. It does not approve, fund, or authorize specific projects. Implementation programs will undergo gradual review and approval, adhering to established adoption protocols. This process may include further public scrutiny, evaluations by the City Council, and environmental assessments mandated by the California Environmental Quality Act.



## Letter from the Mayor

At a critical point in its climate journey, Foster City is greatly influenced by its community's and businesses' innovative and entrepreneurial spirit. This spirit has fueled its legacy in environmental leadership, showcased by initiatives such as the Levee Improvements Project, the various environmental rebates offered by the City, green infrastructure, the Library/Community Center Solar Parking Project, and single-stream recycling, to name a few.

Since introducing the Climate Action Plan (CAP) in 2016, Foster City and the rest of California have faced unprecedented climate challenges such as droughts, heatwaves, wildfires, and extreme storms. These events demonstrate that climate change is an immediate threat to the quality of life in Foster City and the broader San Mateo County. As part of San Mateo County, Foster City confronts rising sea levels, temperature fluctuations, flooding, air pollution, health issues, and water supply concerns, all demanding immediate action. The city has a history of leading in sustainability and climate action, evidenced by its achievements in meeting greenhouse gas (GHG) reduction goals.

In response to these challenges, Foster City has developed a forward-thinking CAP. This plan is rooted in local solutions to tackle the global issue of climate change effectively. It is a comprehensive blueprint for sustainability, involving every community member in the mission to protect our environment and health. In 2023, extensive outreach was conducted to gather feedback on GHG reduction strategies and to understand what sustainable actions community members are already undertaking and the barriers to climate action.

The CAP sets ambitious targets, including **reducing emissions by almost 50% below 2005 levels by 2030, leading towards an 88% reduction by 2045 below 2005 levels.** It also offers practical suggestions for energy efficiency, water conservation, and alternative transportation, emphasizing a collective approach to a sustainable future.

Foster City's efforts, although significant, are just a part of the more extensive community action needed for sustainability. The CAP is a call to action for everyone to join in Foster City's transition toward a cleaner, healthier, and more prosperous future. Your participation is crucial to our success in this endeavor!

Signed,

Patrick Sullivan, Mayor of Foster City

# What You Can Do

## LOW CARBON TRANSPORTATION

- Switch to an electric vehicle (EV) instead of a traditional car.
- Opt for biking, walking, or using public transport as much as possible.
- Cut down on driving by working from home if it's an option.
- Turn off your car when waiting, like at the ATM or school pick-up/drop-off lines.

## RENEWABLE ENERGY & ELECTRIFICATION

- Instead of using natural gas, upgrade to electric appliances and heating systems, such as heat pumps, water heaters, and HVAC systems.
- Choose Peninsula Clean Energy's ECO100 for 100% renewable and carbon-free electricity.
- Put a solar energy system on your home and consider adding battery storage.

## ENERGY EFFICIENCY

- Improve your home or business's energy efficiency by enhancing insulation, sealing leaks, and installing a programmable thermostat.
- Switch to LED bulbs for indoor and outdoor lighting and remember to turn them off when not needed.
- Opt for appliances and equipment that are Energy Star certified for better energy conservation.
- Consider getting an energy assessment for your home or business to identify further energy-saving opportunities.

## WASTE REDUCTION

- Dispose of your food scraps in the green bin or compost them at home.
- Shop smart by purchasing only what you require, and buying previously owned when feasible.
- Give away surplus food, used clothing, and housewares.
- Avoid "aspirational" recycling. Be meticulous in sorting your recyclables correctly.

## WATER CONSERVATION

- Switch out your lawn for a garden that can withstand dry conditions.
- Set up a drip irrigation system, schedule it to operate early in the morning, and routinely inspect it for leaks.
- Opt for faucets, showerheads, and toilets that use less water.
- When it's time to replace them, choose water-efficient dishwashers and clothes washers.

## SEQUESTRATION

- Plant trees appropriate to your situation.
- Add compost to your soil.

## SUSTAINABLE LIVING

- Calculate and commit to reducing your carbon footprint by taking the actions this plan identifies.
- Become a climate advocate at every "table" you sit at - home, work, clubs, school, etc.
- Encourage friends and neighbors to adopt sustainable living practices - lead by example (adopt a plant-based diet, purchase an EV, electrify your home, etc.)





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## Executive Summary

The City of Foster City was established in 1971 in San Mateo County, California. Nestled on the eastern shoreline of the San Francisco Peninsula, it sits between San Francisco and San Jose, east of U.S. 101. Initially conceived as a "Planned Community," Foster City is home to over 33,000 residents and boasts a unique character defined by nine residential neighborhoods complemented by commercial hubs and light industrial areas. Encompassing approximately 20 square miles, four square miles consist of developed land and reclaimed marshland, with the remainder comprised of the waters of the San Francisco Bay and Belmont Sloughs. At around 7 feet above sea level, Foster City relies on a network of levees and seawalls to mitigate tidal and flood risks from the Bay to the east and the Peninsula to the west.

Foster City grapples with climate-related challenges, including rising sea levels, flooding (potential dam inundation), extreme heat, and drought. Since its incorporation, the city has encountered several of these phenomena. Looking ahead, the intensification of these hazards could be exacerbated by evolving climatic conditions driven by rising temperatures and shifting precipitation patterns. Cities stand at the frontline combating climate change, spearheading global efforts to curb carbon emissions through bold policies and embracing clean technologies. Foster City's Climate Action Plan (CAP) sets forth a paramount objective: slashing carbon emissions by 49% below 2005 levels by 2030, marking a pivotal step toward the overarching aim of an 88% reduction by 2045 below 2005 levels.

Remarkably, Foster City has already made substantial headway in its climate endeavors. Between 2005 and 2019, emissions plummeted by 59,820 metric tons (MT) of carbon dioxide equivalents ( $\text{mtCO}_2\text{e}$ ), achieving a 22.5% reduction from 2005 levels. To achieve the targeted 50% reduction by 2030, Foster City must further slash emissions by approximately 135,546  $\text{mtCO}_2\text{e}$  by the end of the decade, a crucial stride in curbing the trajectory of carbon emissions



and averting exacerbated climate impacts.

The CAP delineates a comprehensive roadmap for emissions reduction across two pivotal sectors: 1) energy and water and 2) transportation and land use. Additionally, it emphasizes two additional sectors focusing on (3) waste and consumption and (4) climate resiliency and leadership, recognizing the imperative of fortifying the city against impending climate hazards.

Furthermore, the Climate Action Plan (CAP) underscores the involvement of municipal operations and community engagement, rallying residents, organizations, and businesses to participate in Foster City's emission reduction endeavors. It is an ambitious community-driven platform to propel policies and initiatives that foster quality of life, innovation, and social equity.





Acknowledging that even complete elimination of emissions today won't preclude future climate impacts, Foster City underscores the necessity of fortifying resilience against rising sea levels, heightened temperatures, and exacerbated fire risks. The CAP articulates a strategic blueprint for proactively developing a climate change resiliency plan to address these challenges.

Realizing the considerable investment required to support the CAP, Foster City emphasizes the need to facilitate residents' and businesses' access to funding for decarbonizing buildings, vehicles, and lifestyles.

To ensure the CAP's effective implementation, Foster City underscores forming an interdepartmental team, collaborating with civic and business leaders to maintain momentum and ensure accountability. An online dashboard, annual progress reports, and a five-year CAP update will be integral to tracking and adjusting strategies accordingly.

Ultimately, the CAP serves as a conduit to build upon past successes, rallying stakeholders to actively participate in the transition to a low-carbon future and a clean economy. In doing so, Foster City envisions fostering a resilient economy while nurturing a livable and sustainable community for present and future generations.







# Section 1. Introduction

Climate change, driven by human activities, influences extreme weather and climate phenomena worldwide. Documented changes include more frequent and intense heat waves, heavy rainfall, coastal flooding, droughts, and hurricanes. California, including Foster City, is witnessing the impacts of these climatic shifts. Both gradual changes, like sea level rise, and sudden climate events, such as extreme temperature fluctuations, pose challenges to people, infrastructure, urban areas, and natural ecosystems. These challenges often hit the most vulnerable groups in the community hardest.

In response, Foster City proudly introduces its 2024 Climate Action Plan. This strategic guide outlines the city's approach to tackling climate change. Foster City's residents have already been proactive in environmental stewardship, positioning the city as a leader in regional climate initiatives.

**Aligning with the state's vision, Foster City aims to achieve 88% below 2005 levels by 2045.**

The 2024 Climate Action Plan is an update to the City's first CAP, adopted in 2016. Since completing most of the initiatives in the original Plan, this update charts the course for reaching a new ambitious target. The first Climate Action Plan established the following GHG Reduction targets:

**15% GHG emissions reduction below 2005 levels by 2020**  
*TARGET MET*

**20% below 2005 levels by 2025**  
*TARGET MET*

## What is a Climate Action Plan?

A Climate Action Plan (CAP) is a crucial strategic document for a city, focusing on several key aspects:

- 1. Assessment of Current and Future Greenhouse Gas Emissions:** This involves a detailed analysis of the current levels of greenhouse gas emissions within the city and projections for future emissions based on current trends and policies.
- 2. Setting Greenhouse Gas Emissions Reduction Targets:** The plan sets specific, measurable targets for reducing greenhouse gas emissions within a certain time frame, aligning with broader environmental goals and commitments.
- 3. Developing Strategies and Actions for Emission Reduction:** The CAP outlines various strategies and actions that the city intends to implement to achieve the set emission reduction targets. This could include promoting renewable energy, enhancing public transportation, improving energy efficiency in buildings, and other sustainable practices.
- 4. Projection of Climate Change Impact on Natural Hazards:** The plan also examines how climate change might alter the frequency and intensity of natural hazards like flooding, wildfires, and storms, and prepares the city to adapt to these changes.

Specifically, the CAP for Foster City is tailored to reflect the unique environmental and community characteristics of our City. It represents a reaffirmation of Foster City's commitment to environmental leadership within San Mateo County, showcasing its dedication to sustainable and responsible urban planning in the face of climate change challenges.



Since 2016, significant climate action and sustainable measures have already been taken by the city, including, but not limited to:

- **Enhancing the levee system** to bolster defenses against storm surges and rising sea levels, ensuring its stability until at least 2050.
- **Installing solar panels** at the Library/ Community Center.
- **Adding electric vehicle charging stations** to the library's public parking lot.
- **Upgrading to low-flow faucets and energy-efficient lighting** in city facilities.
- **Shifting city facilities** to entirely renewable energy sources, with community options available through Peninsula Clean Energy.
- **Transforming Park landscapes** to low water usage designs.
- **Providing rebates and financial incentives** for community members to adopt energy-efficient, water-efficient, and sustainable practices.
- **Incorporating electric and hybrid vehicles** into the city's fleet.
- **Implementing the latest Green Building standards** for new construction and remodeling projects.
- **Creating an agreement with Peninsula Clean Energy** to create an Electric Vehicle Fleet Plan.
- **Offering PACE (Property Assessed Clean Energy) Program** financing to residents.

These initiatives reflect Foster City's dedication to environmental responsibility and its role as a forerunner in regional climate action.

In 2021, the existing plan, various measures, and laws were evaluated to update the Climate Action Plan. This review also involved creating a Greenhouse Gas (GHG) Emissions Inventory for 2019, which helped understand how much greenhouse gas the city produced.

The 2019 Greenhouse Gas (GHG) emissions Inventory demonstrated that Foster City produced approximately **205,958 metric tons of CO<sub>2</sub> equivalent community-wide**, spanning residential, commercial/ industrial, transportation, waste, wastewater, and water sectors.

## Foster City's 2019 GHG-Emissions Inventory Key Findings

Foster City's 2019 GHG emissions  
**205,958**  
metric tons

Total GHG reduction since 2005  
**22.5%**  
(from 265,768 metric tons)

Main emissions source  
**Transportation**  
contributing 57% (117,524 metric tons)

Second-highest source  
**Nonresidential energy use**  
(electricity, natural gas), 28% of emissions  
(56,641 metric tons)

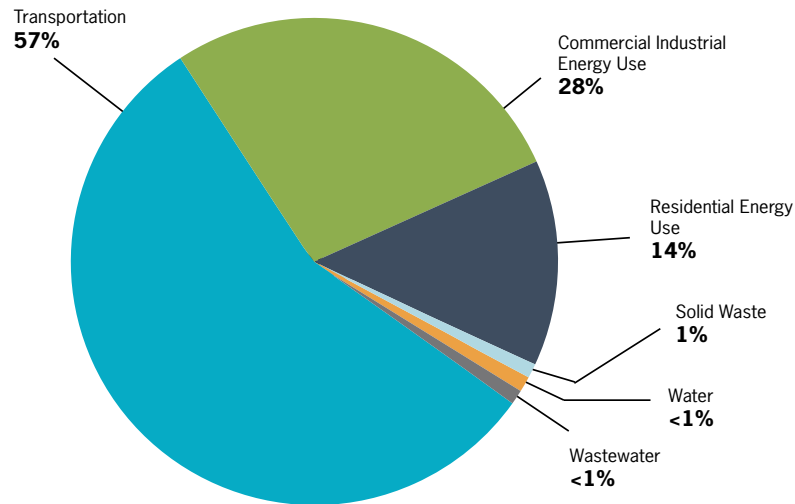
2019 emissions align with 2015 Climate Action Plan goals,  
achieving a 22.5% decrease from 2005 baseline.





This figure represents a **22.5% reduction in total community emissions compared to the baseline year of 2005.**

**Figure 1.1. Foster City 2019 Community GHG Emissions (MTCO<sub>2e</sub>) by Sector**



This CAP update looks ahead to the ambitious goals and transformation we need to achieve and lays the groundwork for embracing innovation and weathering disruption. By achieving the objectives laid out in this CAP, we will achieve the first **milestone target of a 49 percent reduction in our emissions below 2005 levels by 2030<sup>1</sup>**. This will give us momentum to achieve near carbon neutrality before 2045.

In addition to reducing emissions, we also recognize the need to adjust to our changing climate and prepare for more frequent and intense climate change impacts. This CAP indicates the steps we will take to plan our pathway to increased community resilience and climate readiness.

The CAP is a call to action for government, businesses, and residents to engage and support the collective journey to achieving the City’s climate goals.

<sup>1</sup> On September 8, 2016, the governor signed SB 32 into law, extending AB 32 by requiring the State to further reduce GHGs to 40 percent below 1990 levels by 2030.

### Foster City’s Citizens Sustainability Advisory Committee (CSAC)

The City’s Citizens Sustainability Advisory Committee (CSAC) was instrumental in aligning the Climate Action Plan (CAP) with the community’s vision, playing a vital role in outreach and planning. Functioning as an advisory body on sustainability challenges in Foster City, CSAC addresses environmental, economic, and social aspects. Its composition includes five voting members who are residents of Foster City, two youth voting members from the community, two voting members representing local businesses (one from a major employer and another from a small business), and one voting member from a local non-profit organization.

Throughout the climate planning process and beyond, CSAC acted as a key liaison and trusted partner to the wider Foster City community. As representatives of the community, CSAC members were pivotal in forging essential connections and gathering crucial feedback.





Since its initiation in September 2022, the Foster City Climate Action Plan (CAP) Update Project has demonstrated the effectiveness of community engagement in shaping environmental policy. This Plan was developed by the **Climate Action Plan Update Team**, comprised of City Staff, consultants, and the **Citizens Sustainability Advisory Committee**, in collaboration with community stakeholders. With a thorough approach that included a Community Engagement Plan and aggressive community outreach, the CAP team effectively captured the diverse viewpoints of Foster City residents. Insights from surveys, meetings, and focus groups have been crucial to identifying key areas like improved public transportation and sustainable living and highlighting the community's eagerness for proactive climate action, from recycling to advocating for electrification.

This engagement process, driven by the invaluable input of our community, has deepened our understanding of their needs and barriers to action. It has set the stage for actionable strategies, reflecting Foster City's dedication to a collaborative approach to climate change solutions. The solid foundation of community feedback, as the Climate Action Plan advances to implementation, is not just essential for its effectiveness and enduring impact, but it also embodies the essence of collective action for a better future.

While this CAP focuses on the crucial task of achieving the 2030 goal, it's important to note that the continued implementation of the actions in the plan past that date will play a significant role in helping the City reach its 2045 goal. These goals are not just arbitrary numbers, but they represent our commitment to a sustainable future. Ultimately, more aggressive state, federal, and international action is required to reduce global emissions to levels that will avoid the catastrophic impacts of climate change. For this reason, Foster City's CAP contains actions to advocate at the state and federal levels for policies and actions that support the rapid transition to GHG-free energy sources, electrification of buildings and the City's fleet, and other sweeping measures to reduce greenhouse gas emissions sharply.

## The Big Goal:

**49% GHG Emissions Reduction by 2030,  
Leading to an 88% Reduction by 2045 (below  
pre-2005 levels)<sup>1</sup>**

To meet the **2030 49% reduction goal**, this Plan provides a roadmap to reduce emissions and promote climate action and sustainable living in four sectors:



Energy and Water



Transportation and Land Use



Waste and Consumption



Climate Resiliency and Leadership

Each sector has strategies, actions, and methods to encourage community participation. The key actions identified in each sector need to be accomplished within the next five years to stay on pace with achieving the City's climate goals. These sectors were selected based on GHG emissions, community feedback received throughout the engagement process, and climate action best practices.

<sup>1</sup> In 2022, California passed AB 1279, mandating the state to reach "net zero greenhouse gas emissions" at the earliest possible time, with a deadline of no later than 2045. Following this, the state must then attain and sustain net negative GHG emissions.





Table 1.1. List of 2024 Climate Action Plan Target Measures and GHG Emission Reduction Impact

ID #	TARGET MEASURE	SECTOR	GOAL	GHG IMPACT
E-W.1.1	Promote and expand participation in residential and commercial energy efficiency programs	Energy & Water	Reduce emissions from the energy sector	0 MTCO <sub>2</sub> e
E-W.1.2	Reduce municipal energy consumption through energy efficiency projects and behavioral and operational changes	Energy & Water	Reduce emissions from the energy sector	0 MTCO <sub>2</sub> e
E-W.2.1	Increase residential and commercial solar installations	Energy & Water	Decarbonize existing residential and commercial buildings	0 MTCO <sub>2</sub> e
E-W.2.2	Decarbonize existing commercial and residential buildings to reduce natural gas consumption from existing commercial buildings by 19% and natural gas consumption from existing residential buildings by 25% by 2030 or reduce greenhouse gas emissions by 10,792 MTCO <sub>2</sub> e in existing commercial and residential buildings by 2030	Energy & Water	Decarbonize existing residential and commercial buildings	-10,792 MTCO <sub>2</sub> e
E-W.2.3	Support Peninsula Clean Energy in providing 100% carbon-neutral electricity by 2030 and maintain a Peninsula Clean Energy opt-out rate of less than 2% for residential customers and less than 2% for commercial customers by 2030	Energy & Water	Decarbonize existing residential and commercial buildings	-9,825 MTCO <sub>2</sub> e
E-W.2.4	Adopt a single margin source energy score for new residential and commercial construction that exceeds the State's minimum standards by 2026	Energy & Water	Decarbonize existing residential and commercial buildings	-2,805 MTCO <sub>2</sub> e
E-W.3.1	Reduce water consumption by 5% by 2030 and 15% by 2045	Energy & Water	Reduce water consumption	0 MTCO <sub>2</sub> e
T-L.1.1	Reduce vehicle miles traveled in the City	Transportation & Land Use	Reduce vehicle miles traveled in the City	0 MTCO <sub>2</sub> e
T-L.2.1	Increase the passenger ZEV adoption to 31% and commercial ZEV adoption to 25% by 2030	Transportation & Land Use	Reduce vehicle miles traveled in the City	-19,581 MTCO <sub>2</sub> e
T-L.2.2	Decarbonize 18% of gas-powered equipment by 2030	Transportation & Land Use	Decarbonize Transportation	-2,594 MTCO <sub>2</sub> e
T-L.3.1	Increase the community's active transportation mode share to 4% by 2030	Transportation & Land Use	Increase walkability and bike-ability	-100 MTCO <sub>2</sub> e
W-C.1.1	Significantly reduce organic waste to landfills.	Waste & Consumption	Increase diversion of materials from landfills	0 MTCO <sub>2</sub> e
W-C.1.2	Annually procure and apply 2,500 tons of compost by 2030	Waste & Consumption	Increase diversion of materials from landfills	-991 MTCO <sub>2</sub> e
C-L.1.1	Collaborate with community stakeholders to create Local Climate Action Programs that empower individuals to make behavioral changes	Resiliency & Leadership	Educate and support the whole community to live sustainably	0 MTCO <sub>2</sub> e
C-L.1.2	Develop adaptation strategies to assist the Foster City community to the effects of climate change	Resiliency & Leadership	Prepare for and adapt to a rising sea level and climate change	0 MTCO <sub>2</sub> e

**TOTAL CAP GHG EMISSIONS REDUCTION = -46,688 MTCO<sub>2</sub>e**



This CAP also focuses on our municipal operations, issues, and community activities, including how residents, organizations, and businesses can contribute to Foster City's emission reduction goals. It provides an ambitious, community-focused platform to advance policies that enhance quality of life and well-being, embrace smart city innovation, and improve social equity.

Even if all emissions were eliminated today, the City would still experience climate change impacts in the future, including rising sea levels, hotter temperatures, and increased fire risks. Foster City understands the importance of laying out a framework for enhancing Foster City's resilience to these impacts.

To ensure full implementation of the CAP, an interdepartmental team of City staff, in collaboration with civic and business leaders, should be assembled to maintain momentum and ensure accountability. Staff will provide annual progress reports, including greenhouse gas (GHG) inventories, maintain a climate action dashboard on the City's sustainability website ([sustainable.fostercity.org](https://sustainable.fostercity.org)) and will begin preparing an update to the Climate Action Plan after five years.

All Foster City community members, including individuals and businesses, play a key role in reducing emissions. This collective effort is crucial for Foster City to reach its environmental goals. By working together, Foster City has the power to overcome this challenge and build a stronger, more sustainable community for everyone.





## Benefits of Climate Action (and Adaptation)

Beyond the direct benefit of a more stable climate, many climate actions generate additional benefits, such as the ones listed below.



### Public Health

**Actions to mitigate climate change can improve air quality, physical and mental health, and access to healthy food.**

Research suggests that living within 50 to 200 meters of major roadways can trigger asthma symptoms among adults and children and contribute to the development of asthma in children. Consequently, actions aimed at cutting gasoline consumption, reducing traffic congestion, taking vehicles off the road, and electrifying the City's vehicle fleet can reduce the risk of cardiovascular disease, chronic and acute respiratory illnesses, cancer, and preterm births for those near busy roads.

Actions that encourage active modes of transportation can reduce obesity, improve mental health, and diminish the cost of public health services. Green infrastructure projects have been shown to increase recreational opportunities and physical fitness exercises such as dog walking or jogging.

Increased intake of more climate-friendly foods, such as whole grains and vegetables, can reduce the risk of chronic diseases. Adaptation actions that mitigate urban heat island effects, such as planting shade trees, lessen potential health risks to sensitive populations.

The health benefits of climate action include tangible healthcare savings. Reducing CO<sub>2</sub> emissions is less expensive than treating the health effects of climate change.



### Increased Community Resilience

**Addressing climate change and planning for its impacts can also bolster resilience to other hazards. Climate actions also can enhance community cohesion - the networks of formal and informal relationships among neighbors that foster a mutually supporting community.**

- One study showed a direct link between increased vegetation and the use of outdoor spaces for social activity.<sup>2</sup>
- Another study found that even small amounts of greenery increased the safety of urban areas.<sup>3</sup>
- A survey of residents in many different types of neighborhoods found that the more that neighborhoods were walkable and neighbors knew each other, the more likely neighborhood residents were to participate politically, trust others, and be socially engaged.<sup>4</sup>

2 Sullivan, W., Kuo, F. and Depooter, S. (2004). The Fruit of Urban Nature: Vital Neighborhood Spaces. *Environment and Behavior*. 36:678. Retrieved from <https://journals.sagepub.com/doi/10.1177/0193841X04264945>.

3 Kuo, F.E. and Sullivan, W.C. (2001). Aggression and violence in the inner city: Impacts of environment via mental fatigue. *Environment & Behavior*. 33(4): 543-571.

4 Leyden K. M. (2003). Social Capital and the Built Environment: The Importance of Walkable Neighborhoods. *Am. J. Public Health*. 93:1546- 1551.



## Reduced Traffic Congestion

**Climate actions can reduce traffic congestion. Cities such as New York, Stockholm, and London have implemented congestion pricing—tolls to travel in designated urban areas during peak travel times to reduce traffic volume.**

The City/County Association of Governments of San Mateo County and the San Mateo County Transportation Authority partnered to build the San Mateo 101 Express Lanes Project—22 miles of express lanes on U.S.101 from the San Mateo County/Santa Clara County line to I-380 in South San Francisco. The project is designed to reduce traffic congestion and encourage carpooling and transit use on U.S. 101 in San Mateo County.

Foster City has installed ‘no left turn’ signs on parts of East Hillsdale Boulevard to help manage the heavy traffic during rush hours. The Traffic Relief Program aims to lessen the number of drivers who cut through Foster City to avoid traffic jams on Highway 101 and State Route 92. These drivers often use East Hillsdale Boulevard and East Third Avenue to bypass the busy interchange, rejoining State Route 92 later to cross the bridge. Traffic data from 2018 showed a significant increase in cars on East Hillsdale Boulevard during peak times compared to 2015. Besides easing local traffic, this plan also aims to reduce the greenhouse gas emissions from vehicles within the city.



## Social Equity and Inclusion

**Climate action can foster a more equitable and inclusive community.**

City-driven climate action approaches can potentially increase equity and inclusion in both the planning process and in long-term outcomes.

Recognizing the importance of public participation and inclusion, the City conducted two online Community Meetings to expand access, leveraged the diverse makeup of the City’s Citizens Sustainability Advisory Committee (CSAC) to “go where the people are” further increasing community engagement with traditionally hard-to-reach population segments, and provided the community with a menu of opportunities to be heard (surveys, community meetings, sustainable activities, booths at events, focus groups, and individual community conversations). Over 2,000 community members were engaged through the combined efforts of the CAP team.



## Green Economy and Economic Development

**Climate action can boost the local economy through local projects, programs, and jobs.**

Investments in the construction, manufacturing, clean technology, green infrastructure, and civil engineering sectors provide businesses with growth opportunities. They also create skilled, well-paying “green” jobs for the community. For example, many jobs in the renewable energy and energy efficiency sector are in installation, maintenance, and construction—making them inherently local and influential to the local economy. Cities can partner with workforce development organizations, business incubators, B-corporations, and green businesses to build a diverse workforce pipeline for these fields.

### Equity vs. Equality

Equality is like giving everyone the same thing, no matter their situation. Equity, on the other hand, is about giving people what they specifically need to have the same chance as everyone else. Think of it like this: Equality is handing out the same pair of shoes to everyone, while equity is giving each person a pair of shoes that fits them perfectly.





Studies have shown that energy efficiency investments create more jobs than those in fossil fuel industries—the estimate is approximately eight jobs per \$1 million invested, compared to approximately three jobs per \$1 million invested in fossil fuel industries.<sup>5</sup> Climate action and adaptation investments can also save the City and community members money. A study by the University of California Transportation Center estimated that maintenance of electric vehicles (EVs) would cost only 50 percent to 75 percent of the average maintenance cost of a conventional vehicle.<sup>6</sup> The sectors

most likely to benefit from climate actions and policies are those related to household spending, such as housing, wholesale, and retail. Manufacturers of energy efficiency equipment and appliances and renewable energy generation equipment also benefit.

There are numerous other benefits to climate action, including energy security, increased climate leadership, more sustainable behavior, and improved resource efficiency.

5 Environmental Defense Fund Climate Corps. (2017). The Growth of America's Clean Energy & Sustainability Jobs. Retrieved from [http://edfclimatecorps.org/sites/edfclimatecorps.org/files/the\\_growth\\_of\\_americas\\_clean\\_energy\\_and\\_sustainability\\_jobs.pdf](http://edfclimatecorps.org/sites/edfclimatecorps.org/files/the_growth_of_americas_clean_energy_and_sustainability_jobs.pdf).

6 Environmental Defense Fund Climate Corps. (2017). The Growth of America's Clean Energy & Sustainability Jobs. Retrieved from [http://edfclimatecorps.org/sites/edfclimatecorps.org/files/the\\_growth\\_of\\_americas\\_clean\\_energy\\_and\\_sustainability\\_jobs.pdf](http://edfclimatecorps.org/sites/edfclimatecorps.org/files/the_growth_of_americas_clean_energy_and_sustainability_jobs.pdf).

## Why Update the City's Climate Action Plan?

The City of Foster City already plays an important role in shaping community services, including building construction, land use and development, transportation, infrastructure maintenance, parks, and open space management and maintenance. The City is uniquely positioned to lead on climate action, facilitate collaboration and partnerships, and engage residents, businesses, community groups, and other partners, including regional agencies, to join these efforts.

The City of Foster City is updating its original 2016 CAP to align with new State regulations (see *Appendix B: Regulatory Framework*) and targets related to climate change. Furthermore, the 2016 CAP set an emissions target for 2025 to achieve a 20% in GHG emissions below the baseline year of 2005. This updated CAP extends the horizon year to 2030 and sets a long-term goal of 88% emissions reduction below 2005 levels by 2045. The 2016 CAP set the 2025 target of a 20% decrease in emissions from the baseline year of 2005, which the City has already achieved in 2019. The City also implemented many policies, projects, and programs outside of the reduction strategies from the 2015 Climate Action Plan.



## Highlights of the Foster City 2024 Climate Action Plan

This Climate Action Plan update outlines how the City will create new policies, projects, and programs that support the community in reducing GHG emissions and sustainable living. By updating its existing CAP, the City of Foster City continues its commitment to leading the way to a more sustainable future.

Since the City's first Climate Action Plan (CAP) was adopted in 2016, much has changed regarding climate protection. Consequently, this updated CAP includes the following:

- New federal, state, and local policies and updated climate targets, including carbon neutrality.
- Information about climate change impacts and hazards in San Mateo County that the City needs to address and plan for.
- Plans for how the City and Community can to work together to achieve climate goals.
- Foster City GHG emissions from various sectors.
- More ways for individuals, community groups, and businesses to get involved.





## How Do We Achieve the “Big Goal (49% GHG Emissions Reduction by 2030)?”

The City of Foster City already plays an important role in shaping community services. The City evaluated existing local actions and outcomes from the 2016 Climate Action Plan, best practices, and State and regional policies to identify four key Focus Areas and associated Goals to achieve its Climate Reduction Targets.

### Energy and Water Big Goals

- Reduce emissions from the energy sector
- Decarbonize new and existing residential and commercial buildings
- Reduce Water Consumption

#### LARGEST EMISSIONS REDUCTIONS

**Electrify Buildings and Appliances.** This plan includes strategies that will push for new residential and commercial constructions to be entirely electric. Additionally, it calls for replacing natural gas appliances and equipment with highly efficient electric alternatives, such as heat pump technology, when they wear out or break down.

**Energy Efficiency.** The plan includes continued promotion and participation in energy efficiency and conservation programs to reduce energy consumption in the built environment.



### Transportation and Land Use Big Goals

- Reduce vehicle miles traveled in the City
- Decarbonize transportation
- Increase walkability and bike ability

#### LARGEST EMISSIONS REDUCTIONS

**Electric Vehicles.** The plan targets 31% of passenger and 25% of commercial vehicles registered in Foster City to be plug-in electric vehicles by 2030.



### Waste and Consumption Big Goals

- Significantly reduce organic waste in landfills

#### LARGEST EMISSIONS REDUCTIONS

**Compost.** The plan includes procuring compost and applying it.



### Climate Resiliency and Leadership Big Goals

- Educate and support the whole community in living sustainably
- Prepare for and adapt to a rising sea level and climate change

#### LARGEST EMISSIONS REDUCTIONS

**Community Resiliency.** While no GHG emission reductions are associated with these goals, the plan includes actions to improve community resiliency to the effects of climate change.



The 2024 Climate Action Plan Update aims to reach the 2030 target, but continuing its actions beyond that year will help meet the State's goals. However, to truly minimize the severe effects of climate change, more intense efforts are needed at the state, federal, and international levels. Therefore, the CAP includes steps to push for policies and actions at the state and federal levels. These would support a prompt shift to greenhouse gas-free energy sources, electrifying buildings and transportation, and implementing other significant steps to reduce greenhouse gas emissions drastically.



## Section 2. What is Climate Change?

Human activities, notably the burning of fossil fuels for transportation, electricity, and industry, are major contributors to the emission of carbon dioxide and other greenhouse gases, driving global climate change. These emissions trap heat in the Earth's atmosphere, leading to a gradual warming effect. This warming triggers significant changes in the Earth's systems, such as altered rainfall and snow patterns, melting glaciers, and ocean warming. This section provides an overview of climate change and its specific impacts on Foster City.

### Climate Change 101

Climate refers to long-term atmospheric conditions, like average temperature, snowpack, or rainfall. Human-induced greenhouse gas emissions are causing unprecedented changes in the climate system, leading to various global weather and climate extremes, including intense heatwaves, coastal flooding, heavy precipitation, droughts, and hurricanes.

California, including Foster City, is already experiencing the impacts of climate change. Both gradual changes (like sea level rise) and extreme weather events pose risks to people, infrastructure, and ecosystems. These changes disproportionately affect vulnerable populations such as children, older adults, low-income families, and renters. For instance, these groups are more susceptible to health issues during extreme heat and may lack the resources to adapt to climate shocks.

While climate projections don't predict specific future dates, they offer insights into expected climatic changes. For example, they can estimate future temperature increases or the frequency of extreme weather events, though they cannot pinpoint exact timings.

The future extent of climate change partly depends on current and future greenhouse gas emissions, influenced by economic, land use, transportation, and energy systems, as well as social and political factors. Scientists use emission scenarios to understand potential climate outcomes, including a high-emission scenario where emissions rise until 2050 and plateau by 2100, and a low-emission scenario with a peak and decline mid-century due to global reduction efforts.

Climate projections are based on global climate models that simulate past and future conditions. These models help climate scientists assess potential changes based on greenhouse gas emission scenarios.



## Climate Hazards in Foster City

Foster City can expect higher temperatures, worsening air quality, more extreme droughts, more extreme storms, and rising seas due to climate change. Cal-Adapt, the City’s Local Hazard Mitigation Plan (LHMP), and other available tools describe the type, magnitude, and onset of various local exposures of climate change that can be expected by the years 2050 and 2100, as predicted by the modeling of high emissions and low emissions scenarios. This report considers the effects of climate change on local temperature, precipitation, drought, wildfire, and sea level rise.



### Extreme Heat

**California expects hotter conditions for both mean and extreme temperatures. An increase in heat waves and wildfires is likely to be among the earliest climate impacts experienced across the state.**

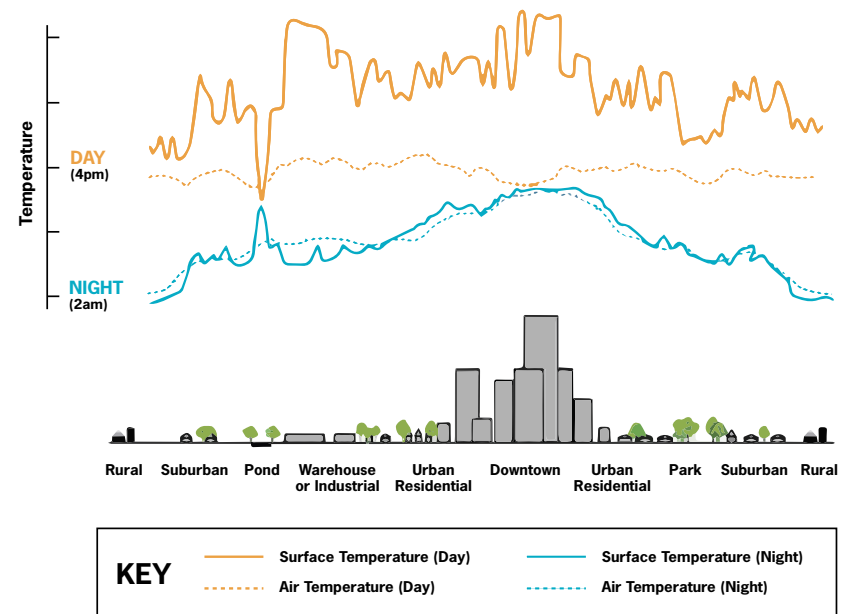
Average maximum temperatures in Foster City are expected to increase by 5-9 degrees Fahrenheit by the end of the century (CalAdapt, 2021). Historically, Foster City has experienced approximately four days of extreme heat per year (For Foster City, this is defined as days when the maximum temperature rises above 93 degrees). This is expected to increase to between 11 and 19 extreme heat days annually by the end of the century (CalAdapt, 2021). Across the region, heat waves are expected to occur more frequently, and be more intense and long-lasting due to climate change.

Unfortunately, Foster City’s tree canopy, which can provide much-needed shade during extreme heat, is limited relative to other cities in the state. It covers only seven percent of its land, and this percentage is weighted by the number of people per acre. (HPI 2021)

**Figure 2.1** illustrates the “urban heat island” effect, where buildings, roads, and urban infrastructure absorb and re-emit the sun’s heat more intensely than the natural landscape. This effect becomes exaggerated in urban areas with limited greenery, resulting in higher

daytime and nighttime temperatures relative to outlying areas. The urban heat island effect may exacerbate warming and extreme heat in Foster City and result in higher cooling demands.

**Figure 2.1. Urban Heat Island Effect in Foster City**



Source: USEPA, 2001

## Anticipated Impacts

Increases in the number and intensity of extreme heat events will result in public health impacts, including heat-related illnesses, death, and worsening of cardiovascular and respiratory conditions. Additionally, extreme heat can impact mental health by causing stress, aggression, and fatigue and by worsening existing mental health conditions. The 2006 heat wave in California killed over 600 people and resulted in 1,200 hospitalizations and 16,000 emergency department visits (CNAP, 2015). Extreme heat days also result in missed school and work days due to heat-related illnesses.

Extreme heat can indirectly impact health when power outages are caused by stress on the electrical grid and increased electricity demand for air conditioning. Power outages put vulnerable populations such as older adults and individuals with existing health conditions at further risk as they must go without medical devices, air conditioning, and refrigeration. Power outages can also result in traffic disruptions and resulting delays in emergency response.

Extreme heat may also result in higher energy costs to cool homes and over long periods may result in tree-die off and the loss of urban tree canopy and parks.

## Vulnerabilities

Populations vulnerable to extreme heat include individuals with chronic illnesses, children, older adults, unsheltered individuals, uninsured individuals, people with reduced mobility, outdoor workers, linguistically isolated households, and low-income households.

Energy infrastructure experiences stress during periods of high demand that can impact the regional energy grid and result in power outages. Critical infrastructure such as emergency response facilities, healthcare facilities, cooling centers, and community centers may be vulnerable to extreme heat especially if they do not have backup power sources. Extreme heat can also damage roads

due to softening and melting of asphalt, especially in areas with high traffic volumes. Emergency response facilities cannot maintain operations if the connections to power or to transportation routes between facilities and areas served are damaged or disrupted. Higher average temperatures and long heat waves can also impact regional water sources by increasing water demand and evaporation losses.

Most Foster City residents live within walking distance of a park, beach, or open space which can provide relief during extreme heat events. Additionally, the City's proximity to the San Francisco Bay and the Pacific Ocean helps mitigate severe heat impacts relative to other communities lying further inland.







## Air Pollution

**Foster City is vulnerable to high levels of air pollution, mainly diesel particulate matter (diesel PM) resulting from high traffic density and proximity to state and federal highways.**

The area near the city center is in the 73rd percentile statewide regarding diesel PM. On an average day, the City experiences almost 15 kg/day of pollution from diesel PM. Climate change is expected to increase diesel PM and ground-level ozone concentrations, exacerbating the existing pollution burden in the City (CNRA, 2018; Park et al., 2020).

Regional wildfires are expected to increase in frequency and severity in the coming decades. While wildfires in Northern California are generally not a direct threat to Foster City, their far-ranging smoke impacts will worsen the city's air quality (CNRA, 2018). Additionally, changes in precipitation and temperatures are expected to increase pollen and airborne allergens, which may increase allergic reactions and asthma attacks.

### Anticipated Impacts

Foster City already experiences air pollution, which higher temperatures and smoke from regional wildfires will exacerbate. Poor air quality may worsen existing health conditions.

When wildfires are extreme, such as in the fall of 2020, poor air quality may require individuals to “shelter in place” in their homes, which can negatively impact physical and mental health and cause missed work and school days.

### Vulnerabilities

Communities and individuals who live in census tracts with poor air quality are susceptible to the effects of climate change. The City has relatively high levels of diesel PM, particularly in the census tracts near the center of the City, making it vulnerable to worsening air quality caused by climate change. Trees reduce air pollution by intercepting airborne particles and through the uptake of air pollutants through the leaf stomata. As a result, areas with greater tree cover, like the southeastern portion of the city, generally have better air quality compared to areas with fewer trees. Populations that are particularly vulnerable to the impacts of poor air quality include children, the elderly, outdoor workers, individuals with existing health conditions such as asthma, individuals without access to healthcare, and communities with low birthweights.





## Sea Level Rise

**Sea level rise is primarily caused by the melting of ice sheets and glaciers and the expansion of seawater due to global warming. As much of Foster City and the Bay Area is close to the shore, rising sea levels represent one of the region's greatest, if not the greatest, threats from climate change.**

Several agencies in San Mateo County have conducted multiple studies on sea level rise, ensuring they use the latest data and scientific findings as climate conditions change. So far, sea level rise has been the most extensively researched aspect of climate change in the Bay area. San Mateo County has also created a Sea Level Rise Vulnerability Assessment. This assessment pinpoints regional risks and outlines strategies to enhance resilience against rising sea levels.

In April 2018, the City/County Association of Governments of San Mateo County (C/CAG) Countywide Water Coordination Committee started working on a plan to create a countywide organization to tackle sea level rise, flooding, coastal erosion, and stormwater infrastructure at a regional level. After considering different ways to set up this agency, the Committee suggested expanding the scope, area, and governing board of the existing 1959 San Mateo County Flood Control District. Assembly Bill 825 (Mullin) was enacted following this recommendation in September 2019. Consequently, on January 1, 2020, the San Mateo County Flood and Sea Level Rise Resiliency District, also known as One Shoreline, was established.

Foster City took dramatic steps to address Sea Level Rise by implementing the Levee Improvements Project which began 2014 when the Federal Emergency Management Agency (FEMA) determined that the Levee did not meet the minimum criteria for flood protection. To maintain FEMA accreditation and keep Foster City properties out of the flood zone, Foster City voters approved Measure P in 2018 with nearly 81% support, authorizing the City to

issue a \$90 million general obligation (GO) bond to improve and strengthen the Foster City levee system.

The project began construction in October 2020, and over the past several years, the City and a team of contractors have worked to construct the new and improved levee and Bay Trail. The project is expected to be completed in 2024.

### Forecast

The global mean sea level has increased by approximately seven to eight inches in the past century, caused by the anthropogenic influence of the global climate. The San Francisco Bay Area sea levels have increased by about eight inches since 1987 (SMC, 2018). However, the rise in sea level is expected to accelerate even faster in the coming decades, with potential increases of 1.0 feet to 10.2 feet by 2100 (CNRA, 2018). Coastal areas in the Bay Area are expected to experience an approximately 15% increase in areas vulnerable to flooding by 2100 (APG, 2012). Sea level rise increases typical tidal water levels, storm water levels, and flooding inundation risk. The frequency and intensity of coastal storms are expected to increase with climate change.

Daily tidal inundation refers to the effects of sea level rise on high tides, permanently increasing inundation of lower-lying areas. [Figure 2.2](#) conceptually shows how sea level rise will affect daily tidal inundation and the severity of flooding from future coastal storms. [Figure 2.3](#) depicts the projections of the San Mateo County area's regional sea level rise.

**Note:** This section is directly informed by the 2021 Multijurisdictional Local Hazard Mitigation Plan (San Mateo County, 2021), County of San Mateo Sea Level Rise Vulnerability Assessment (2018), and Adapting to Rising Tides.



Figure 2.2. Conceptual Shoreline Cross-Section Showing Tidal Inundation and Coastal Storm Flood Hazards

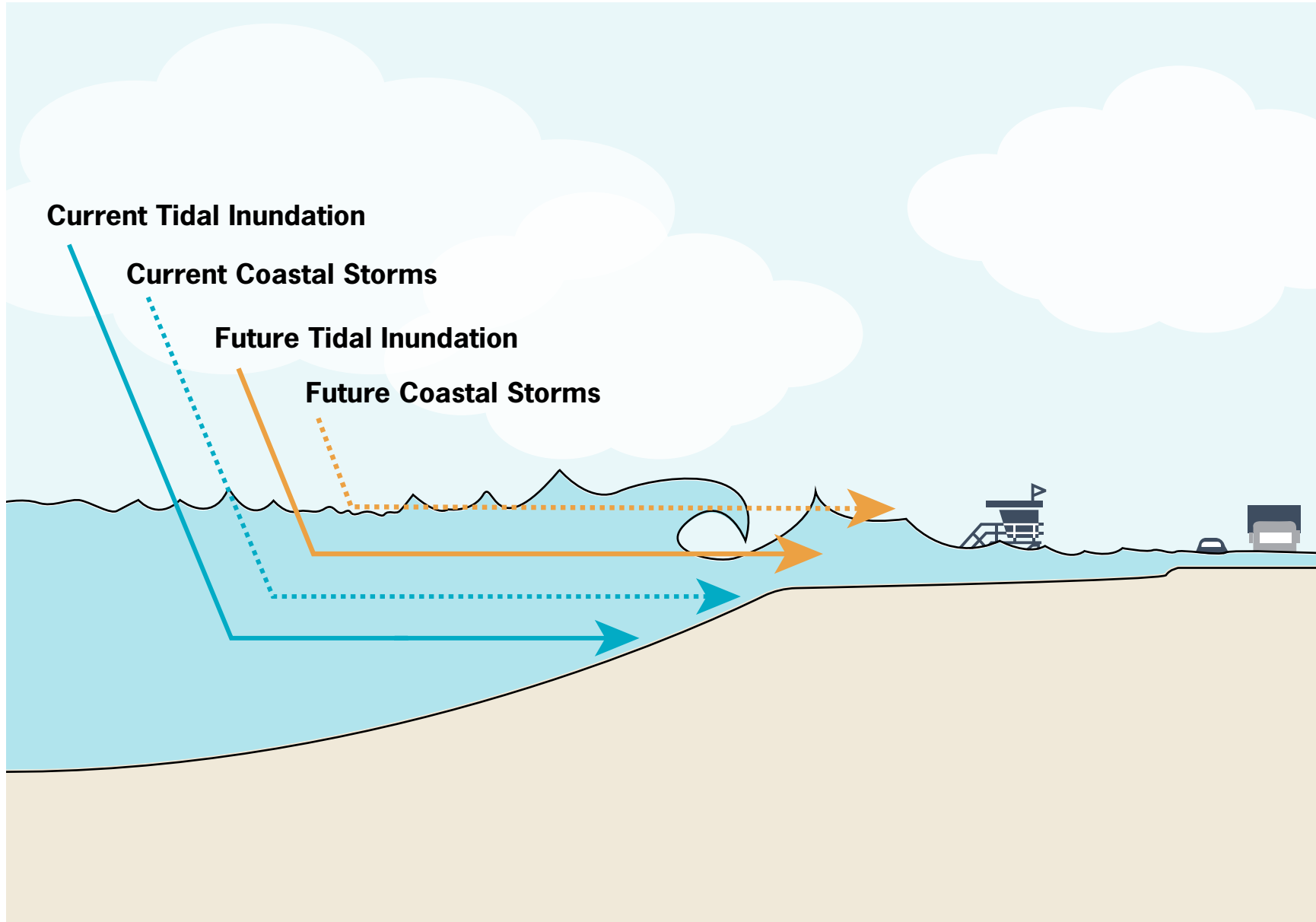
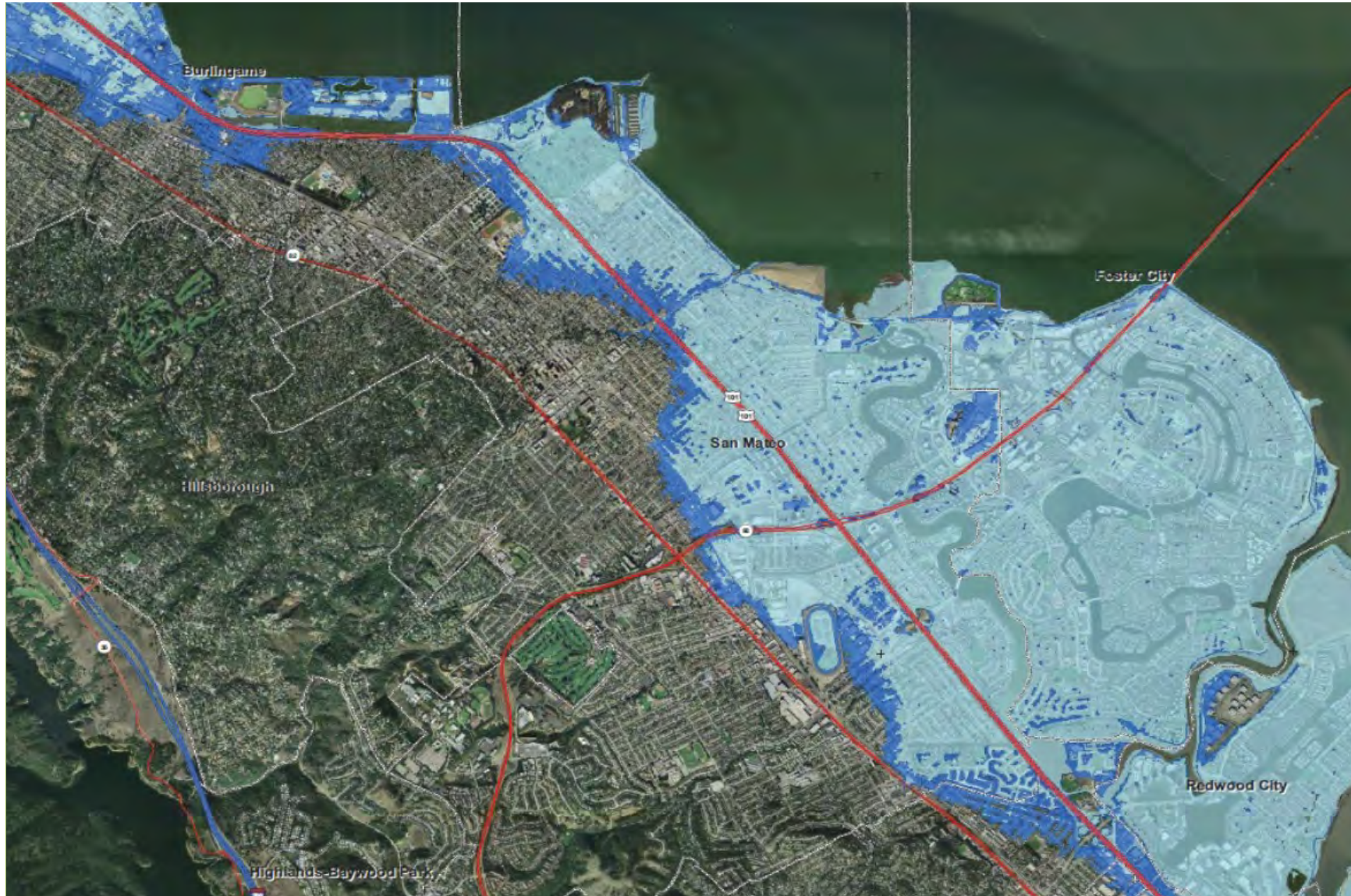


Figure 2.3. Projected Sea Level Rise by 2100 in San Mateo County



Note: Figure 2.3 shows the projected SLR shows conditions **without** the Levee Improvements Project.



## Impact

The San Francisco Bay Area is one of the nation's hotspots for sea-level rise. Sea-level rise and coastal erosion will continue to affect public health facilities, and access to emergency medical services could be impaired. Flood events can lead to physical injury, illness, or disease (e.g., vector-borne diseases like West Nile virus), and business disruption.

In 2018, the County of San Mateo finalized a Sea-Level Rise Vulnerability Assessment for the County in coordination with cities, agencies, businesses, community groups, and others. Sea-level rise impacts include flooding, increased wave action, rising groundwater tables and saltwater intrusion, increased erosion (i.e., landward shoreline retreat), and changes in sediment supply.

The economic value of San Mateo County property at risk from sea-level rise surpasses that of any other county in the Bay Area. The assessed value of parcels in the study area exposed to near-term (present-day) flooding exceeds \$1 billion, and the assessed value of parcels exposed to erosion and flooding in the long term (50 to 100 years) totals a staggering \$39.1 billion. Moreover, the built and natural infrastructure designed to shield people and properties from flooding could be lost or severely impacted, including over 7,000 acres of wetlands (over 80 percent of all wetlands assessed) and up to 24 miles of floodwalls and levees.

When population projections are considered, San Mateo County is one of six counties with more than 100,000 people in the nation (and the only one on the West Coast) that will be affected by three feet of sea-level rise.

## Vulnerabilities

If the city did not raise the levee and take other adaptation actions before 2100, sea level rise would impact homes, roads, or major infrastructure. Additionally, the combined impacts of sea level rise and extreme rainfall could increase coastal and inland flooding of

roads, residences, and evacuation routes. Ninety-nine percent of the population in Foster City lives within a sea level rise inundation area (HPI, 2021).

Recreational land uses such as parks and trails will be affected by sea-level rise. Other infrastructure designed to protect residents in a flood is vulnerable. This infrastructure includes outfalls, storm drains, and a stormwater pump station. Approximately 90% of Foster City's wetlands, which will help the city adapt to rising sea levels, would be affected.

Population groups most vulnerable to coastal hazards include older individuals and individuals with reduced mobility, as they may be less able to evacuate in the event of flooding. Low-income households, renters, rent-burdened households, and single-heads of the household are less likely to have access to financial resources and forms of reliable transportation, which are critical when evacuating from flood hazards or rebuilding following a flood event. Unhoused individuals are particularly exposed to flood events and may have difficulty evacuating or relocating during a flood. Linguistically isolated households may also be vulnerable in a flood event as they may face more difficulty accessing timely information about evacuation.

Foster City's physical vulnerabilities to sea level rise include residences, transportation infrastructure, businesses, recreational facilities, emergency response facilities, and stormwater and wastewater infrastructure.

Unfortunately, mitigating the impacts of rising sea levels is costly and requires extensive resources. Additionally, natural flood protection and natural recreation areas could be lost from significant impacts from rising sea levels.





## Extreme Storms and Stormwater Flooding

**Foster City's coastal areas and some areas further inland fall within the 100-year flood zone and storm wave hazard areas, as designated by FEMA. The City is also fully within the "Area of Minimal Flood Hazard."**

### Forecast

Foster City's coastal areas and some areas further inland fall within the 100-year flood zone and storm wave hazard areas, as designated by FEMA. The city is also entirely within the "Area of minimal flood hazards." Under existing conditions, during a 50 or 100-year storm, widespread flooding can occur throughout the City. Figure 2.4, from the City's 2020 Local Hazard Mitigation Plan (LHMP) (part of the City's General Plan Safety Element), shows flood hazard areas at risk from 100-year and 500-year storms.

Foster City's levee system provides flood protection from the San Francisco Bay area's tidal action. City land within the levee system is not at risk from the 100-year floodplain, and flooding does not pose risks to land development (Foster City Land Use and Circulation Element, 2016)

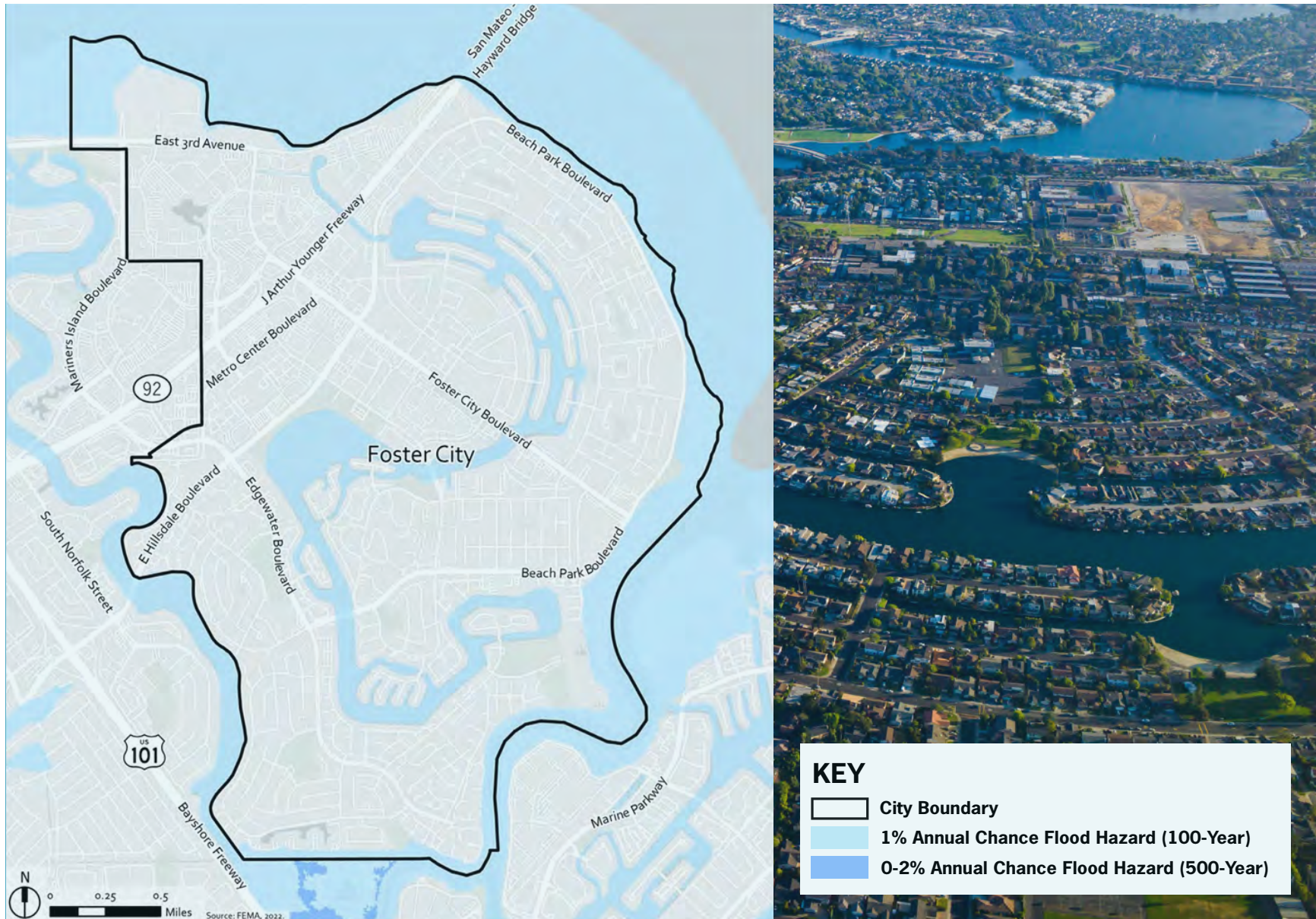
The city has existing natural and artificial infrastructure that protects it from flooding hazards. The Foster City Lagoon is a storm drainage retention basin, while Belmont Slough and Marina Lagoon are stormwater basins.

Climate change is expected to increase the frequency, intensity, and duration of extreme precipitation events, likely increasing these types of flooding. By the late 21st century, total rainfall during precipitation events may increase by as much as 37 percent. The frequency and severity of atmospheric river events (narrow bands of concentrated moisture that deliver intense precipitation over several days) are projected to increase in Foster City. Additionally, the impacts of stormwater flooding will be compounded by rising sea levels. With higher coastal water levels, extreme rainfall events will likely result in water backing up into the stormwater system and flooding through maintenance holes as the stormwater system cannot move water into the ocean quickly enough.

Flooding from severe storms has been a common hazard in the Bay Area from 1950-2015, occurring on average 1.3 times per year over the past 60 years. (Local Hazard Mitigation Plan)



Figure 2.4. FEMA Flood Hazard Areas







## Anticipated Impacts

Changes in snowpack levels and seasonal dryness increases could significantly impact regional water supply. As a part of the Bay Area Water Supply and Conservation Agency, Foster City relies heavily on water originating from the Sierra Nevada, with approximately 85% of the City's total water supply coming from the Hetch Hetchy Watershed, sourced from the spring snowmelt from the Tuolumne River. The City also receives water from two local watersheds, the Alameda and Peninsula Watersheds. The recent 2011 to 2015 drought resulted in a declared State of Emergency and Bay Area water districts announcing local emergency proclamations.

Increased extreme storms and precipitation can result in flooding of streets, roads, and low-lying areas of the City due to the diminished function of the stormwater drainage system. Flooding can impact important roadways and evacuation routes, as well as emergency evacuation routes and response times. Flooding of transportation routes may result in neighborhoods or households becoming stranded, unable to evacuate or access critical resources, or to be reached by emergency response. Additional surface water on roads can also lead to hazardous driving conditions. More frequent and severe flooding could damage residential and commercial property, displace populations, and cause injuries. Additionally, flooding can have a long-term impact, increasing mold and respiratory health issues.

If critical facilities such as emergency shelters, emergency response centers, or healthcare facilities are located below grade or have infrastructure situated below grade, they could be impacted by severe storms and flooding. Extreme storms and flooding also have the potential to affect power supplies, which are needed to deliver water, power, and other critical needs to residences and critical infrastructure such as hospitals and emergency response centers.

## Vulnerabilities

Vulnerable populations include individuals without automobile or transit access, linguistically isolated individuals, young children, and older adults, as they may be less able to evacuate in the event of a flood. Additionally, low-income households, renters, rent-burdened households, and single-head households are less likely to have access to financial resources and forms of reliable transportation, which are critical when evacuating from flood hazards or rebuilding following a flood event. Unhoused neighbors are particularly exposed to flood events and may have difficulty evacuating or relocating during a flood. Linguistically isolated households may be particularly vulnerable in a flood event as they may have more difficulty accessing evacuation information.

The City's storm drain infrastructure is likely vulnerable to increases in precipitation. Property, facilities, and infrastructure below grade may also be vulnerable to stormwater flooding. This includes critical facilities, such as hospitals, fire stations, police stations, and city operations. The City's corporation yard, located within the flooding hazard area, contains a pump system that reduces interior flooding, water supply, and critical communications equipment during emergencies. Should flooding events occur, the facility and equipment could be damaged, and access to the facility could be hindered, affecting emergency response services. Other critical infrastructure at risk includes wastewater infrastructure and roads, which can potentially lose function with severe flooding.







## Drought

**The Bay Area is at low risk of primary impacts from drought due to climate change, as the majority of Bay Area water sources are located outside of the region. Several secondary impacts can adversely affect the region, including a decrease in the water supply, impacts on agriculture quality and quantity, increased hazards from wildfires, and increased heat conditions.**

### Forecast

Potential impacts may include a decrease in the water supply, impacts to agriculture quality and quantity, increased hazards from wildfires, and increased heat conditions. California experienced mild to extreme drought conditions over the past decade, which affected water supply statewide. Drought is affected by the quantity and distribution of rainfall and temperature. When total annual precipitation comes in fewer, more concentrated events, reservoirs and groundwater aquifers become saturated and cannot store additional water.

Water is then lost to stormwater runoff and is not retained in the watershed as it would with more evenly distributed precipitation. Warmer temperatures also increase snow melt, soil evaporation, and evapotranspiration, leading to drier soils, vegetation, and overall drier seasonal conditions.

California's climate is quite unpredictable, with significant changes in rainfall from year to year. In early 2023, for example, intense "atmospheric river" events led to more rain but less water stored in watersheds. Also, rising temperatures are expected to make soils drier and quickly lose moisture.

Rainfall in the Bay Area will keep showing dramatic shifts, alternating between very wet and very dry years. The Fourth Climate Assessment of California predicts more frequent and intense

downpours. These heavy rain events could account for up to 50% of the yearly rainfall, despite being only 17% of all rain events. Typically, these extreme storms dump a lot of rain over a small area, leading to flooding, especially in flood-prone regions. Moreover, studies suggest that warmer temperatures and short but intense rainfalls might increase the risk of flash floods and debris flows, especially in areas recently affected by wildfires.

Climate change is expected to increase the intensity and duration of future droughts (CNRA, 2018). More severe and prolonged droughts across California could significantly impact regional water supplies. In particular, climate change is expected to reduce snowpack in the Sierra Nevada, which supplies the majority of water for the Bay Area, placing pressure on groundwater resources and imported water supply. California has experienced prolonged, severe droughts in recent years, triggering water restrictions. These periods of drought are expected to increase in frequency and severity. The Bay Area is expected to experience secondary impacts on water supplies due to reduced snowpack levels.

### Anticipated Impacts

The 2012-2016 statewide drought led to the most drastic moisture shortages in the last 1,200 years, resulting in a 1-in-500-year low in the Sierra snowpack. This drastically reduced snowpack resulted in \$2.1 billion in economic losses, 21,000 jobs lost statewide in agricultural and recreational sectors, and a continuing exhaustion of groundwater sources.

Even while drought conditions lessened in 2023 due to increased rain in the Winter of 2023, the markers for future droughts persist. As climate changes and drought become more prevalent, Foster City's primary reliance on Hetch Hetchy will become more problematic, with ever-increasing calls for conservation as the greater Bay Area relies on this vital resource as a continued reliable drinking source.



The Estero Municipal Improvement District (EMID), which provides water service to Foster City, declared a water shortage emergency in 2014, leading to water conservation measures. Intensification of future droughts could result in more water restrictions, water price increases, and water quality impacts. Stress on the water supply could be compounded by rising sea levels impacting groundwater resources. However, the County of San Mateo Sea Level Rise Vulnerability Assessment (2018), which evaluated the primary sources of potable municipal water supply in the Water Districts of San Mateo County, found that groundwater is not currently a resource for the majority of the Water Districts in San Mateo County, including EMID.

Increases in the frequency and severity of drought are likely to impact open spaces and parks, resulting in dry soils and vegetation and the loss of some species that are not drought tolerant. Drought could result in loss of urban tree canopy and overall damage to local parks. Impacts on vegetation in parks and open spaces may also indirectly affect wildlife. Regionally, stress on water supply may impact agricultural yields and result in higher food prices. Increases in the severity and length of seasonal dryness and periods of drought are likely to increase the severity of regional wildfires. While wildland fires do not directly threaten Foster City, regional wildfires can worsen Foster City's air quality.

Under extreme conditions, drought can impact paving materials, resulting in racking and warping of paving materials. The loss of water storage and water supply can also reduce hydroelectric generation, a significant power source in California, leading to grid instability and increased reliance on fossil fuels to meet peak energy demand.

## Vulnerabilities

Vulnerable populations include low-income households who will be disproportionately affected by increases in water prices. Additionally, individuals sensitive to air pollution, including outdoor workers and those with chronic illnesses, are indirectly impacted by drought when it increases the frequency and severity of regional wildfires, causing more smoke and bad air quality days. The city's physical assets vulnerable to drought include parks, urban trees, and water supply infrastructure.



## Increased Impact on Energy Systems

**The Bay Area electrical grid, on which the City relies, is vulnerable to power outages during wind and wildfire events such as Public Safety Power Shutoffs (PSPS), planned power outages to prevent occurrences of electrical equipment starting wildfires.**

Many of the State's natural gas pipelines are located along waterways and will be impacted by flooding from sea-level rise and extreme storm events. California's transportation fuel sector, which distributes oil from refineries to end users, will be increasingly exposed to extreme weather events such as flooding and wildfire.



## Section 3. Greenhouse Gas (GHG) Emissions

The first step toward developing a climate action plan is to identify sources of emissions and establish baseline levels. In 2021, the City performed a Community and Municipal inventory for calendar year 2019. The 2019 inventory was conducted using the same methodology for developing RICAPS inventories. It was prepared using a consistent methodology across all previous data years, except the road length adjustment by Caltrans in 2016, which resulted in a significant VMT reduction for 2016.

Overall, emissions have gone down considerably since 2005, and the City has achieved the first two reduction targets from the 2015 Climate Action Plan.

### Methodology

This Climate Action Plan includes a detailed assessment of community Greenhouse Gas (GHG) emissions. This involves evaluating the emissions from both residents and businesses, as well as from municipal operations. This assessment follows recognized protocols and industry best practices to ensure accuracy and adherence to standards. The process begins by pinpointing the various activities that lead to GHG emissions. Data on these activities for a specific calendar year was then gathered and summarized. Utilizing scientifically established GHG emission factors, this data is transformed into a comprehensive account of the GHG emissions resulting from all the identified sources. These emissions are quantified in metric tons of carbon dioxide equivalent (MT CO<sub>2</sub>e), providing a clear picture of Foster City's environmental impact and paving the way for targeted climate action strategies.

This Climate Action Plan features a generation-based GHG inventory focused on emissions from various local sources (Table 4.1), such as transportation, energy use in the built environment (through electricity, natural gas use, and other stationary fuel combustion), and emissions from solid waste management (specifically, methane release during organic waste breakdown in landfills). Additionally, it covers water and wastewater-related emissions. However, it's important to note that not all GHG-emitting activities within the city

are accounted for in this inventory. Activities beyond the scope of city policies, and thus outside their control, are omitted. For instance, emissions from vehicles merely passing through the city, with no origin or destination within city limits, are omitted since these are not within the local government's sphere of influence. Additionally, GHG emissions related to food sources, such as meat and dairy consumption instead of plant-based sources, are not included.

#### What is RICAPS?

The Regionally Integrated Climate Action Planning Suite (RICAPS), is a set of tools and a collaboration of all 20 incorporated cities and the County in climate action planning and implementation. The 20 cities and the County work together to plan and implement measures to reduce greenhouse gas (GHG) emissions (mitigation), and to plan for climate change (adaptation). A working group of cities meets monthly and a countywide technical contractor supports the cities and the County by helping them develop climate action plans, GHG emission inventories, and by providing guidance on plan implementation.



There are two established GHG Inventory methods. Below is an analysis of both approaches.



### Generation-Based GHG Inventory

#### Methodology

Focuses on emissions based on energy use.

#### Key Aspects

- *Direct Energy Consumption:* Includes transportation energy use.
- *Electrical Grid Consumption:* Accounts for energy used from the grid.
- *Waste-Related Emissions:* Considers emissions from waste treatment and decomposition.

#### Industry Standard

This method is widely accepted for quantifying community GHG emissions and categorizing them by their source. *This approach has been used consistently for GHG Inventories since 2005.*

### Consumption-Based GHG Inventory

#### Methodology

Centers on emissions tied to overall consumption.

#### Holistic Approach

This approach offers a broader perspective by quantifying emissions from residents' consumption of goods and services, including food, clothing, and electronics.

#### Emissions Reporting

Emissions are categorized based on consumption types.

#### Challenges and Limitations

- *Data Availability:* There's a scarcity of necessary data to implement this method effectively.
- *Life-Cycle Calculations:* Difficulties arise in conducting life-cycle assessments with limited data, such as the specific breakdown of food types consumed per household.

*This plan does not employ this methodology due to the above challenges.*

In summary, While the generation-based inventory method focuses on direct and indirect energy consumption and waste-related emissions, the consumption-based method takes a broader view, considering the entire lifecycle and variety of goods and services consumed. However, challenges like data availability and the complexity of life-cycle calculations have hindered the implementation of the consumption-based approach in Foster City's plan.

## 2019 GHG Emissions Inventory

Foster City's first generation-based inventory was completed for 2005 (the baseline year). Then, in 2010, new residential/business GHG inventories were completed annually, enabling Foster City to track progress over time. The whole community inventory was completed for all residential, business, and municipal sectors.

In 2019, another whole community inventory (residential, business, and municipal) was conducted, which showed that the City emitted an estimated 205,958 metric tons (MT) of carbon dioxide equivalent (CO<sub>2</sub>e) from the residential, commercial/industrial, transportation, waste, wastewater, and water sectors. Compared to the baseline year 2005, 2019 saw a 22.5% decrease in total community emissions.

The inventory provides a detailed understanding of where the highest emissions come from and, therefore, where the most significant opportunities for emissions reductions lie. The inventory also establishes a baseline emission inventory against which to measure future progress.

Emissions are quantified according to these six sectors:



The **Energy - Electricity** sector represents emissions generated from electricity use in homes, commercial and public buildings and facilities, and electric vehicle charging in Foster City.



The **Energy - Natural Gas & Multiple Fuels** sector represents emissions generated from using natural gas in homes and natural gas and multiple fuels in commercial buildings.



The **Transportation** sector includes emissions from local roads and off-road equipment. Electricity used to charge electric vehicles is embedded in electricity consumption reported in the Built Environment - Electricity sector.



The **Solid Waste** sector represents fugitive methane emissions generated over time as organic material decomposes in landfills. Although most methane is captured or flared off at the landfill, approximately 25% escapes into the atmosphere.



The **Wastewater** sector represents stationary, process, and fugitive GHGs created during wastewater treatment generated by the community and emissions from energy used to process wastewater.



The **Water** sector represents emissions from energy used to pump, convey, treat, and distribute potable water from the water source to water users in Foster City.

The two largest emissions categories are transportation (including highway travel, local travel, and off-road equipment) and building energy use (including residential and commercial/industrial).



Table 3.1. Foster City 2019 Community GHG Emissions (MTCO<sub>2</sub>e) by Sector (breakdown)

Inventory / Sector	2019 GHG Emissions	Percent of Total Emissions (%)
<b>Energy (Built Environment)</b>		<b>42%</b>
<b>Electricity</b>		<b>7%</b>
Residential Electricity	<b>4,075</b> (MT CO <sub>2</sub> e)	<b>2%</b>
Commercial/Industrial Electricity	<b>10,483</b> (MT CO <sub>2</sub> e)	<b>5%</b>
<b>Natural Gas &amp; Multiple Fuels</b>		<b>35%</b>
Residential Natural Gas	<b>24,940</b> (MT CO <sub>2</sub> e)	<b>12%</b>
Commercial/Industrial Natural Gas	<b>25,420</b> (MT CO <sub>2</sub> e)	<b>12%</b>
Stationary Source (Multiple Fuels)	<b>20,738</b> (MT CO <sub>2</sub> e)	<b>10%</b>
<b>Transportation</b>		<b>57%</b>
Transportation - Local Roads & State Highways	<b>100,867</b> (MT CO <sub>2</sub> e)	<b>49%</b>
Off-road Equipment	<b>16,657</b> (MT CO <sub>2</sub> e)	<b>8%</b>
<b>Solid Waste</b>		<b>1%</b>
Solid Waste Disposal	<b>2,234</b> (MT CO <sub>2</sub> e)	<b>1%</b>
<b>Wastewater</b>		<b>&lt;1%</b>
Wastewater Treatment	<b>536</b> (MT CO <sub>2</sub> e)	<b>&lt;1%</b>
<b>Water</b>		<b>&lt;1%</b>
Water Use	<b>8</b> (MT CO <sub>2</sub> e)	<b>&lt;1%</b>
<b>Total</b>	<b>205,958</b> (MT CO <sub>2</sub> e)	<b>100%</b>







Table 3.2. Foster City 2019 Municipal GHG Emissions (MTCO<sub>2e</sub>) by Sector (breakdown)

Municipal Inventory Sector	
Energy - Buildings & Other Facilities	<b>372</b> (MT CO <sub>2e</sub> )
Transportation - Vehicle Fleet	<b>443</b> (MT CO <sub>2e</sub> )
Solid Waste	<b>26</b> (MT CO <sub>2e</sub> )
<b>Total</b>	<b>841</b> (MT CO <sub>2e</sub> )

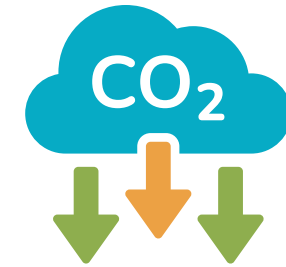


Table 3.3. Foster City GHG Community Emissions Comparison 2005 vs. 2019 (energy breakdown by residential and commercial/industrial emissions)

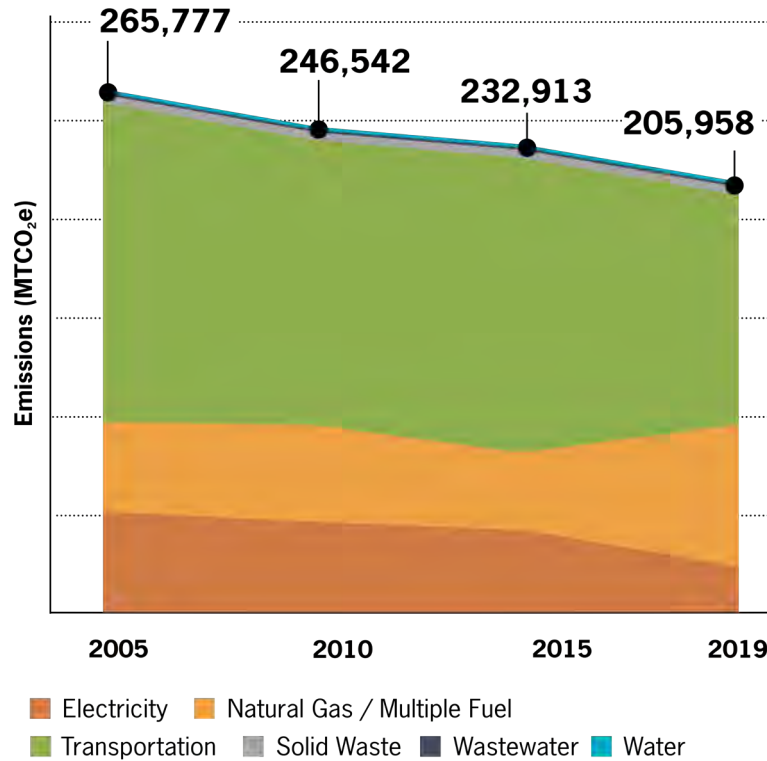
Sector	2005 GHG Emissions	2019 GHG Emissions	% Change in Emissions
Residential - Energy <sup>7</sup>	<b>44,742</b> (MT CO <sub>2e</sub> )	<b>29,015</b> (MT CO <sub>2e</sub> )	<b>-65%</b>
Commercial/Industrial - Energy <sup>8</sup>	<b>53,581</b> (MT CO <sub>2e</sub> )	<b>56,641</b> (MT CO <sub>2e</sub> )	<b>+5%</b>
Transportation - Local Roads & State Highways	<b>163,301</b> (MT CO <sub>2e</sub> )	<b>117,524</b> (MT CO <sub>2e</sub> )	<b>-28%</b>
Solid Waste	<b>4,153</b> (MT CO <sub>2e</sub> )	<b>2,234</b> (MT CO <sub>2e</sub> )	<b>-54%</b>
Water <sup>9</sup>	N/A	<b>8</b> (MT CO <sub>2e</sub> )	N/A
Wastewater	N/A	<b>536</b> (MT CO <sub>2e</sub> )	N/A
<b>Total</b>	<b>265,777</b> (MT CO <sub>2e</sub> )	<b>205,958</b> (MT CO <sub>2e</sub> )	<b>-22.5%</b>

<sup>7</sup> In 2005, 37% of Residential emissions were derived from electricity. In 2019, the percentage dropped to 14%. Residential natural gas use has remained relatively flat.

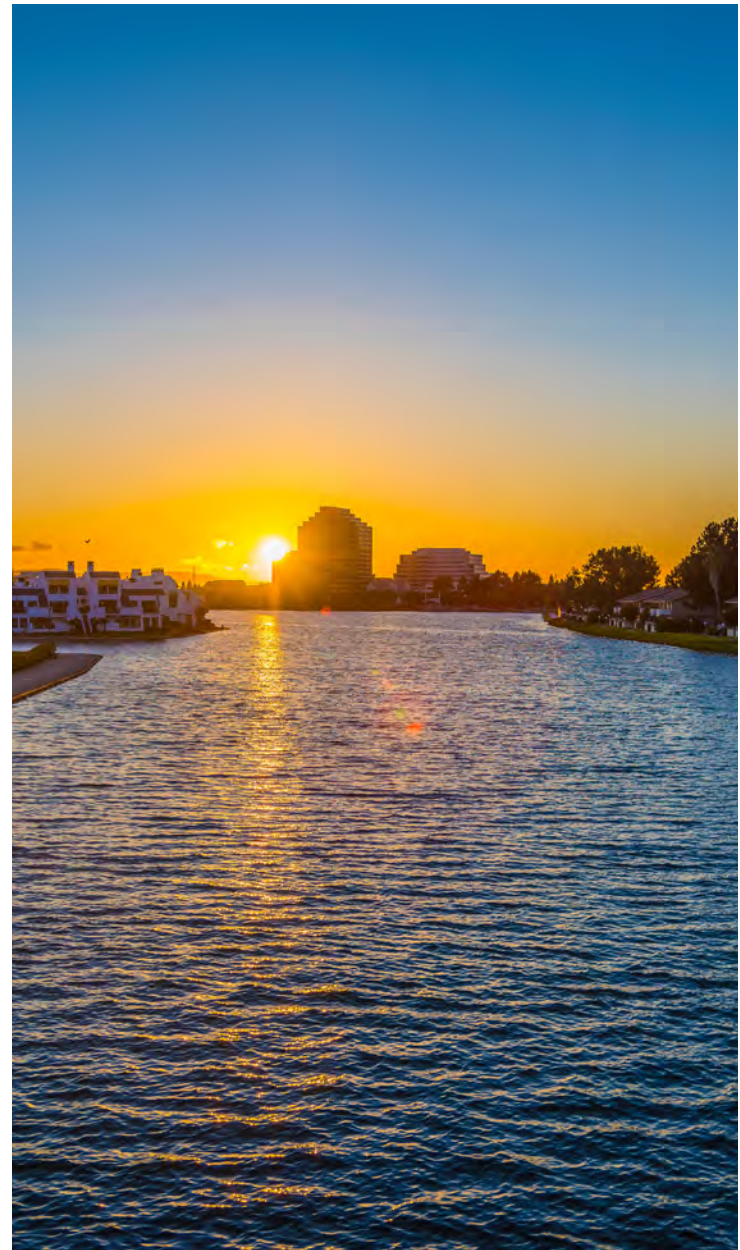
<sup>8</sup> Commercial/Industrial energy use has remained flat between 2005 and 2019. However, compared to 2005, Commercial/Industrial electricity use decreased 72% but natural gas and other stationary sources increased 64%.

<sup>9</sup> Water and wastewater emissions were not available for 2005.

Table 3.3. Foster City Community Annual Emissions Over Time: 2005 – 2019



The most notable shift in GHG emissions comes from residential energy use (Table 3.2). Overall, the results indicate that the City has already achieved the target milestone from the 2015 Climate Action Plan of reducing community-wide emissions 15 percent below 2005 levels by 2020 and 22.5 percent lower than 2005 levels the City has achieved its 2025 - 20% GHG Emissions Reduction Goal (Table 3.3).





**Energy (Built Environment)**

**85,656 MT CO<sub>2</sub>e**

From 2005 to 2019, Foster City witnessed a remarkable 72% reduction in electricity emissions. The residential sector saw a 75% decrease, paralleled by a 72% decline in the commercial and industrial sectors.

This significant reduction is linked to the city's transition to Peninsula Clean Energy (PCE) despite an overall increase in electricity consumption within this period. A pivotal shift in electricity emissions was observed in 2016, marked by a substantial decrease despite stable consumption levels from the previous year. This drop in emissions is credited to adopting Peninsula Clean Energy (PCE) as San Mateo County's electricity generator in 2016, which benefits both municipal and community accounts. Municipal accounts switched to the ECO100 service, offering 100% renewable energy. At the same time, the community opted into the ECOplus service, which provides 50% renewables per the state's standards, with the option to upgrade to the ECO100. Residential electricity usage rose by 64%, and commercial/industrial usage by 74%.

Natural gas emissions in residential areas have steadily declined, with a 12% reduction from 2005 to 2019. In contrast, commercial and industrial natural gas and stationary source emissions surged by 52%. The decrease in residential natural gas emissions is attributed to a drop in consumption, given the consistent carbon intensity of natural gas combustion and a steady push toward electrification over the past 15 years. Use of commercial/industrial natural gas and other fuels (stationary source) has increased yearly due to increased commercial/ industrial activity in the north part of Foster City.

**Transportation**

**117,524 MT CO<sub>2</sub>e**

Transportation is the sector with the highest GHG emissions, accounting for 57% of 2019 emissions. These emissions derive from local roads (including pass-through trips) and off-road equipment.

Between 2005 and 2019, transportation emissions fell by 34 percent. This decrease was due to less transportation activity, improved vehicle fuel efficiency, and an updated methodology for tracking transportation emissions.<sup>10</sup>

**Solid Waste**

**2,234 MT CO<sub>2</sub>e**

Solid Waste emissions, accounting for about 1% of the City's total emissions, saw a considerable reduction of 37% from 2005 to 2010. They remained relatively steady from 2010 to 2019. Overall, emissions from solid waste fell by 46% from 2005 to 2019, but the decrease was just 15% from 2010 to 2019.

Greenhouse gas (GHG) emissions from solid waste occur when organic materials decompose under anaerobic conditions in landfills, releasing methane that is 28 times more potent than CO<sub>2</sub>. In these anaerobic environments, organic waste like paper, plant debris, and food waste generates methane, whereas non-organic waste such as metal and glass does not.

**Water and Wastewater**

**544 MT CO<sub>2</sub>e**

Water and wastewater contribute minimally to the City's emissions, each accounting for less than 1 percent of the total. These sectors were excluded from the 2005 emissions inventory due to a lack of data. It was presumed that emissions from water usage were included under the energy sector and emissions from wastewater treatment<sup>11</sup> were considered minimal.

However, between 2010 and 2019, emissions from wastewater treatment increased substantially by over 200 percent, while emissions related to water usage dramatically decreased by 99 percent. In absolute terms, this equates to an increase of about 366 MTCO<sub>2</sub>e for wastewater and a decrease of 559 MTCO<sub>2</sub>e for water.

10 RICAPS uses California Public Road Data (PRD) from Caltrans' Highway Performance Monitoring System (HPMS) for all jurisdictions within San Mateo County, unless the jurisdiction requests the alternative. HPMS VMT data is collected using the in-boundary method, which is more likely to include pass-through trips that fall within the jurisdiction.

11 Wastewater Treatment Plant emissions are shared with San Mateo, since Foster City and San Mateo share use and ownership of the San Mateo-Foster City Wastewater Treatment Plant (currently under construction).





## 2030 – 2045 GHG Emissions Forecasts

To develop a GHG emissions forecast, “growth metrics” (e.g., population, housing, and employment projections) are multiplied by Business-as-Usual (BAU) “growth indicators,” which represent a baseline metric developed from the GHG emissions inventory. This process allows the City to convert growth projections into future GHG emissions estimates using specific GHG emissions factors, which are assumed to be the same in the future as in the 2019 GHG emissions inventory. The result is a BAU forecast in which GHG emissions change in relation to demographics, assuming that GHG emissions rates and activity data will continue in the future as they did in the year of the 2019 GHG emissions inventory. This methodology is used for all GHG emissions sectors and sources included in the 2019 GHG emissions inventory.

The **adjusted GHG emissions forecast** then accounts for reductions anticipated from state and regional legislation already in place. For example, the California Renewable Portfolio Standard (RPS) mandates that 100 percent of the electricity sold by the State’s investor-owned utilities be generated from renewable resources by 2045, with an interim target of 60 percent by 2030. The impact of state- and regional-level actions on reducing local emissions is significant and can be seen in **Figure 3.5**. It is shown in relation to Foster City’s emissions baseline, business-as-usual forecast, and reduction target.

### “Business-as-usual” (BAU) emissions (Figure 3.4)

This projection represents the emissions expected if the 2019 patterns of travel, energy and water consumption, and waste generation/disposal were continued throughout time. This projection factors in the expected county population rate and job growth across Foster City. This projection is considered without any measures, policies, or actions reducing emissions over time, including state legislation and/or any other policies or procedures accepted after 2019.

### Adjusted emissions (Figure 3.5)

This projection incorporates the same factors as the BAU scenario but includes key State and regional policies. State policies include clean car standards, California Renewable Portfolio Standards (RPS), and energy efficiency policies such as Title 24. This projection *does not include* the effect of Peninsula Clean Energy (PCE) operating in San Mateo County (see Section 6: Strategies). However, switching from PG&E to PCE reduces energy emissions by providing electricity sourced from a larger share of renewable and carbon-free sources, resulting in lower emissions. Though PCE provides critical emissions reductions through 2030 and 2040, by 2045, the Renewable Portfolio Standard will have closed that gap by forcing all electricity providers to offer a similarly clean energy mix.

<p>Foster City's 2019 Emissions</p> <p><b>205,957</b> MT CO<sub>2</sub>e</p> <p>(Foster City's emissions in 2019)</p>	<p>2030 Emissions Adjusted for State Programs</p> <p><b>182,153</b> MT CO<sub>2</sub>e</p> <p>(Calculated 2030 Goal)</p>	<p>2030 Adjusted BAU Emissions Recution Target</p> <p><b>135,546</b> MT CO<sub>2</sub>e</p> <p>(Foster City's Adjusted 2030 Goal)</p>	<p>Foster City's Adjusted Emissions Reduction Goal</p> <p><b>46,607</b> MT CO<sub>2</sub>e</p> <p>(Reductions needed to meet 2030 Goal)</p>
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Figure 3.4. Foster City Business-as-Usual (BAU) GHG Emissions Forecasts

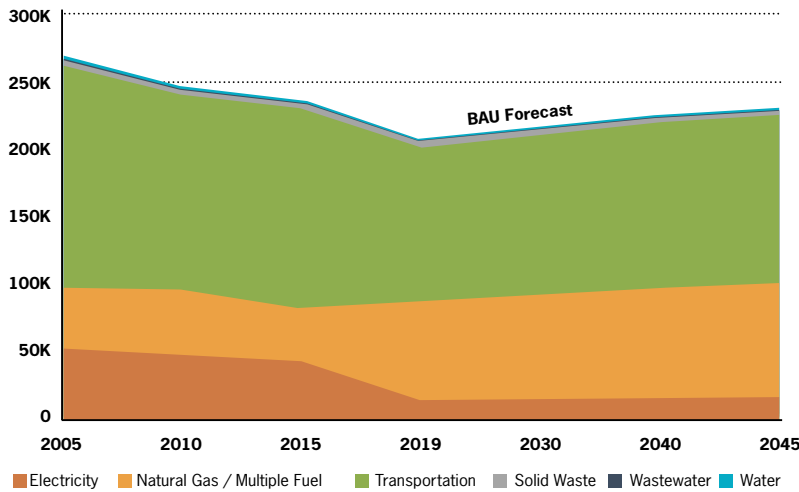


Figure 3.4 shows the Business-as-Usual (BAU) forecast for Foster City’s projected growth. Between 2019 and 2030, emissions are projected to increase by 10 percent, roughly 23,000 MTCO<sub>2</sub>e. Between 2019 and 2045, emissions are projected to rise by nearly 35 percent, an increase of approximately 108,700 MTCO<sub>2</sub>e.

In addition to the Business-as-Usual (BAU), forecasts were developed under the adjusted BAU scenario, which accounts for the expected impact of significant federal and state policies and regulations designed to reduce GHG emissions from the energy and transportation sectors of the economy. The RICAPS Forecasting Tool was used to develop the adjusted BAU forecast, which includes the following regulations and assumptions:

- Advanced Clean Cars initiative
- Low Carbon Fuel Standard
- Renewables Portfolio Standard (RPS)
- Zero net energy (ZNE) new residential construction by 2020
- ZNE existing commercial construction by 2030
- SB 1383 - Organic Waste Diversion



**46,607** (MT CO<sub>2</sub>e)

This reduction is necessary to reach the 2030 goal. Foster City is committed to taking the actions needed to meet this target. Those actions are described in Section 5: Strategies to Reduce Greenhouse Gas Emissions. By implementing the strategies in this Plan, **emissions are projected to decrease by 46,688 (MTCO<sub>2</sub>e) by 2030.**

Figure 3.5. Foster City Adjusted BAU Forecast GHG Emissions Forecasts

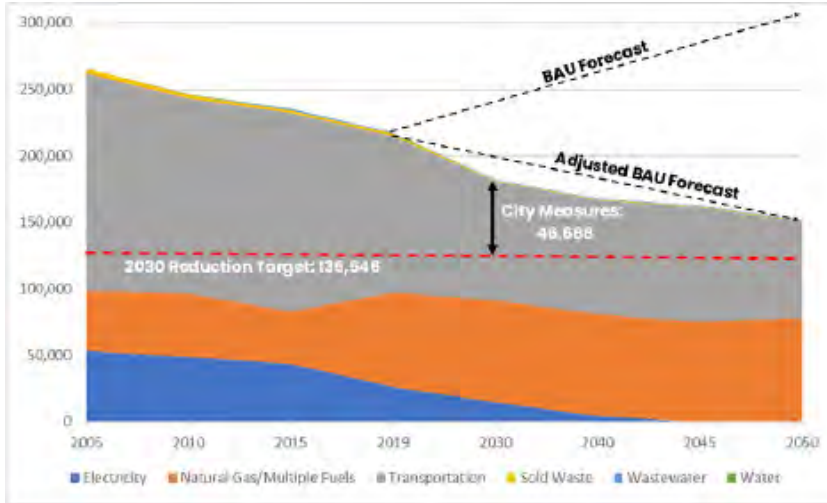


Figure 3.5 graphically depicts the adjusted BAU forecast, showing the large contribution State regulations are expected to have on the City's future emissions. The City projects that the 2030 Adjusted GHG Emissions will be approximately 182,153 MT CO<sub>2</sub>e, a 31% reduction from 2005 levels.

As projections extend further into the future, confidence in their accuracy diminishes, given the uncertainty surrounding advancements and shifts in technology, regulations, and business conditions. However, the forecasting exercise provides a valuable basis for estimating Foster City's future carbon footprint and establishing a roadmap for setting targets and reducing emissions.

To reach the 2045 goal, a much greater reduction would be needed. It is unlikely that the GHG reduction measures in the CAP will be enough to achieve an 85% emissions reduction by 2045 (below 2005 levels). However, one can reasonably expect significant reductions from additional state actions and technological advances in the transportation and energy sectors over an extended period.







## Section 4. Greenhouse Gas (GHG) Reduction Targets

California has set bold and aggressive goals to reduce greenhouse gas (GHG) emissions. The California Global Warming Solutions Act (Assembly Bill 32) of 2006 aimed to bring emissions down to 1990 levels by 2020. Due to a lack of available data for 1990 emissions for local governments, the California Air Resources Board (CARB) suggested they aim to reduce emissions by 15% from their current levels, as noted in the 2008 Climate Change Scoping Plan. Due to the uncertainty of 1990 data, San Mateo County cities typically use 2005 as their baseline for measuring emissions and set their GHG reduction goals based on that year.

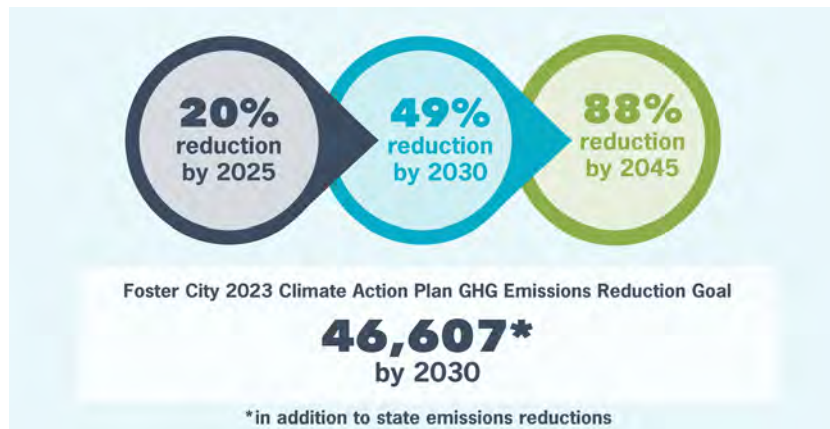
The State has set more ambitious goals for the future. Senate Bill 32, passed in 2016, targets a 40% reduction below 1990 levels by 2030. Assembly Bill 1279, from 2022, aims for an 85% reduction from 1990 levels and achieving carbon neutrality by 2045.

## 2024 Climate Action Plan Reduction Targets

This Climate Action Plan sets goals to cut community-wide emissions by 49% below 2005 levels (estimated to be 40% below 1990 levels), and aims for 88% by 2045. The CAP outlines specific actions and projects emission reductions up to 2030.

Foster City has already surpassed its 2020 GHG reduction target, set in the 2016 Climate Action Plan, of a 20% reduction by 2025. As of the 2019 GHG inventory, Foster City has cut emissions by 22.5% compared to the 2005 baseline.

Figure 4.1. Foster City 2024 Climate Action Plan GHG Emissions Reduction Targets



The GHG Emissions reduction required by 2030 below business-as-usual projected emissions, **135,546 MT CO<sub>2</sub>e**, is the equivalent of taking **32,160 passenger vehicles off the road for an entire year**.

However, after adjusting for State regulations (Adjusted Emissions), Foster City needs to reduce local emissions by **46,607 MT CO<sub>2</sub>e**. **Section 5 includes strategies and actions to support the 2030 goal and sets the City on the path toward 2045.**

Figure 4.2. 2024 Local Greenhouse Gas Emissions Reduction Strategies

Strategy	GHG Reduction by 2030	Share of Total Reductions
Electrification	<b>-13,597</b> (MT CO <sub>2</sub> e)	<b>31%</b>
Peninsula Clean Energy	<b>-9,825</b> (MT CO <sub>2</sub> e)	<b>20%</b>
Decarbonize Transportation	<b>-22,275</b> (MT CO <sub>2</sub> e)	<b>48%</b>
Procurring Compost	<b>-991</b> (MT CO <sub>2</sub> e)	<b>1%</b>
<b>TOTAL</b>	<b>-46,688</b> (MT CO <sub>2</sub> e)	

To meet the 2030 Target, Foster City must reduce overall GHG emissions by

**135,546**  
MT CO<sub>2</sub>e



## Section 5. Strategies to Reduce Greenhouse Gas Emissions

The 2024 Climate Action Plan Update includes a variety of regulatory, incentive-based, and market-based strategies that are expected to reduce emissions. Several strategies build on existing programs while others provide new opportunities to address climate change. State actions will have a substantial impact on future emissions. Local strategies will supplement these State actions and achieve additional GHG emissions reductions. Successful implementation will rely on the combined participation of City staff and residents, businesses, and community leaders.

For each of the four sectors a description of the specific actions the City will undertake to implement each measure is needed. Sometimes, there is no direct or reliable way to estimate GHG savings for a particular measure or the savings are embedded in another measure.

### Community Engagement

The Climate Action Plan Project Team, which included City Staff, consultants, and members of the City's Citizens Sustainability Advisory Committee (CSAC), conducted extensive outreach on proposed draft strategies (see [Appendix C: Community Engagement](#) for more information). Through surveys, Community Meetings, and individual and group conversations with community members, the following key themes, priorities, and concerns were identified:

- Respondents felt subsidies were needed to help homeowners, multifamily housing, and businesses upgrade their infrastructure.
- Respondents want updated building codes requiring solar panels and other sustainability metrics.
- Respondents are worried about overdevelopment and want to preserve green space while adopting more drought-resistant plants.
- Residents were very interested in creating more bike infrastructure and public transportation options for residents of Foster City.
- There was an acknowledgment of the difficulty of upgrading and adopting technology while owning within a homeowners association.
- Some respondents suggested taxing bad behaviors, such as creating too much waste, recycling improperly or using too much electricity.





## 2024 Climate Action Plan Update Reduction Strategies Overview

This Climate Action Plan sets goals to cut communitywide emissions by 49% below 2005 levels (estimated to be 40% below 1990 levels) and aims for an 88% reduction by 2045. The CAP outlines specific actions and projects emission reductions up to 2030.

The local strategies presented in the following sections, summarized in Table 5.1 and Figure 5.2 below, achieve GHG emissions reductions in the community of approximately 46,688 MTCO<sub>2e</sub> in 2030.

To meet the 2030 49% reduction goal, this Plan provides a roadmap to reduce emissions and promote climate action and sustainable living in **four sectors**:

- Energy and Water (E-W)
- Transportation and Land Use (T-L)
- Waste and Consumption (W-C)
- Climate Resiliency and Leadership (C-L)



Each sector has strategies, actions, and methods to encourage community participation. The key actions identified in each sector must be accomplished within the next five years to stay on pace with achieving the goals in this plan. These sectors were selected based on GHG emissions, community feedback received throughout the engagement process, and climate action best practices. GHG mitigation measures and actions are organized according to the following hierarchy:

- **Sectors:** Sectors define the GHG emissions category in which the GHG reductions will occur (see above). Each sector has goals, which the measures and actions support.
- **Target Measures:** Measures identify specific targets and GHG reductions necessary to address GHG emissions in each sector and achieve the community's GHG reduction targets. **The GHG emissions reduction is included for each measure, if quantifiable.**
- **Actions:** Actions are the specific steps the City and community will implement to support each measure, which will accomplish the measure goal together. Actions specifically identify the mechanisms required for implementation. Measures and actions can be either quantitative or supportive, depending on whether they directly result in GHG emissions reductions or instead support reductions (for example, the development of partnerships or education programs).

This CAP also focuses on municipal operations, issues, and community activities, including how residents, organizations, and businesses can contribute to Foster City's emission reduction goals.

## Sector 1. Energy and Water (E-W)

In California, buildings account for 70 percent of total electricity use and 20 percent of total GHG emissions. In 2019, buildings in the residential and commercial/industrial sectors accounted for 42 percent of total emissions in Foster City, with 83 percent of building emissions resulting from natural gas or other fuel (stationary sources) consumption and 17 percent resulting from electricity consumption.

Buildings commonly use electricity for lighting, refrigeration, ventilation, cooling, and powering devices like computers and phones. Conversely, natural gas is mainly utilized for space heating, water heating, and cooking.

### Connection Between Energy and Water Use

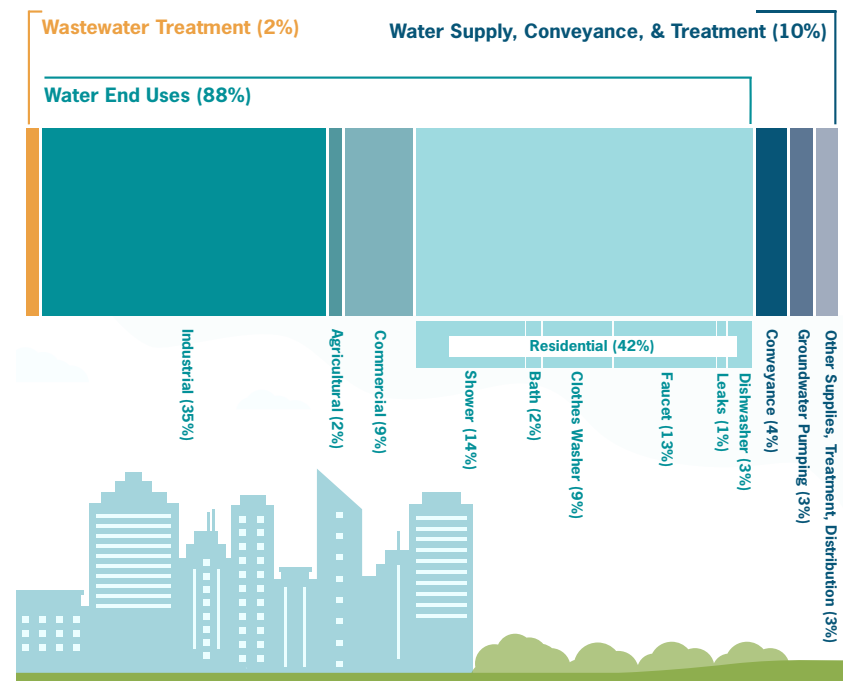
Energy and water usage are interconnected. Energy is necessary for water transport, wastewater, and heating water in homes and businesses. Around 20% of the state’s electricity and 30% of its natural gas are used in these water-related processes. **Figure 5.1** illustrates that 10% of this energy is dedicated to water transport and treatment, with the remainder used for heating water across various sectors.

Far more emissions are created from the energy used to heat water, but those emissions are counted in the residential and commercial energy sectors. Therefore, the water sector comprises a much smaller share of community emissions than one might expect.

The State of California remains a leader in implementing policies to reduce water consumption. Assembly Bill 1668 (AB 1668) and Senate Bill 606 (SB 606), adopted in 2018, require urban water providers to establish a target for water use by 2022 and threaten fines for agencies failing to meet their goals beginning in 2027. Standards will be based on an allowance of 55 gallons per person per day for indoor water use, a to-be-determined amount of

residential outdoor use, and a standard for water loss due to leak rates in water system pipes.

**Figure 5.1. Energy (Electricity and Natural Gas) Used by the Water Sector in California**





## Considerations

To reach Foster City's 2030 emissions reduction target, natural gas consumption will need to decline significantly through energy efficiency and electrification. Energy efficiency is simply using less energy to perform the same task; for example, replacing a low-efficiency gas furnace with a high-efficiency gas furnace. Electrification replaces equipment in buildings powered by natural gas, including gas furnaces and gas water heaters, with electric equipment, such as air source heat pumps and heat pump water heaters. With the launch of Peninsula Clean Energy and the State's requirement through Senate Bill 100 (SB 100) that utilities procure 100 percent of electricity through renewable resources by 2045, the percentage of building emissions associated with electricity will continue to decline.

### What is Peninsula Clean Energy (PCE)?

Peninsula Clean Energy began providing electricity from clean energy sources at lower rates than PG&E to 20 cities and towns across San Mateo County in 2016. Customers of Peninsula Clean Energy have two different product options: ECOplus has lower power rates and nearly double the percentage of renewable energy as PG&E. ECO100 is 100% renewable, providing the greatest climate benefit. Peninsula Clean Energy also provides a suite of rebates and resources to electrify homes and vehicles, for both residents and businesses. Learn more at: <https://www.peninsulacleanenergy.com/>

## The Big Energy and Water Goals

<b>E-W.1</b> <b>Reduce emissions from the energy sector</b>	<b>E-W.2</b> <b>Decarbonize existing residential and commercial buildings</b>	<b>E-W.3</b> <b>Reduce Water Consumption</b>
<ul style="list-style-type: none"> <li>• <b>Target:</b> Promote and expand participation in residential and commercial energy efficiency programs.</li> <li>• <b>Target:</b> Reduce municipal energy consumption through energy efficiency projects and behavioral and operational changes.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Target:</b> Increase residential and commercial solar installations</li> <li>• <b>Target:</b> Decarbonize existing commercial and residential buildings to reduce natural gas consumption from existing commercial buildings by 19% and natural gas consumption in existing residential buildings by 25% by 2030 or reduce GHG emissions by 10,792 MTCO<sub>2e</sub> in existing commercial and residential buildings by 2030</li> <li>• <b>Target:</b> Support PPCE in providing 100% carbon-neutral electricity by 2030 and maintain a Peninsula Clean Energy opt-out rate of less than 2% for residential customers and less than 2% for commercial customers by 2030</li> <li>• <b>Target:</b> Adopt a single margin source energy score for new residential and commercial construction that exceeds the State's minimum standards by 2026</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Target:</b> Reduce water consumption by 5% by 2030 and 15% by 2045.</li> </ul>





## E-W.1 Reduce emissions from the energy sector

- ▶ **Target: Promote and expand participation in residential and commercial energy efficiency programs**
- ▶ **Target: Reduce municipal energy consumption through energy efficiency projects and behavioral and operational changes**

Enhancing the energy efficiency of buildings is typically the most economical way to reduce greenhouse gas (GHG) emissions. Implementing energy efficiency measures, like improving insulation and fixing leaks in heating ducts, can lead to energy savings of up to 20%. More comprehensive renovations, such as "whole house" retrofits, can yield even greater savings. Many of these upgrades are affordable and don't require extensive remodeling. Simple changes can be highly cost-effective, such as replacing incandescent bulbs with LED bulbs, sealing drafts, and installing programmable thermostats. Investing in Energy Star-certified appliances, high-efficiency heating and cooling systems, and high-performance windows conserves energy and lowers operational costs. Various rebates, financing options, and tax incentives are often available for residents and businesses to support these improvements, helping offset the initial investment costs.

California mandates green building and energy efficiency standards through its Title 24 building codes, updated roughly every three years. Since 2001, these updates have consistently heightened energy efficiency requirements. The state's ultimate goal is for all new buildings to achieve zero net electricity consumption. Local governments can hasten progress toward this goal by recommending energy efficiency standards for new constructions and remodels that surpass state requirements. Additionally, they can foster faster community adoption by offering incentives, technical support, and simplified permitting processes. In 2023, the City commissioned an electrical capacity study to better understand Foster City's challenges in decarbonizing residential and commercial buildings.

### **E-W.1.1 Promote and expand participation in residential and commercial energy efficiency programs**

#### **0 MTCO<sub>2</sub>e Emissions Reduction by 2030**

**E-W.1.1.1:** Market participation in commercial energy efficiency programs offered by SMC Energy Watch and PG&E.

**E-W.1.1.2:** Promote appliance rebate programs offered by Peninsula Clean Energy (PCE), PG&E, and the Bay Area Air Quality Management District (BAAQMD).

**E-W.1.1.3:** Continue and expand participation in energy efficiency programs as they become available. Promote utility, state, and federal rebate and incentive programs.

**E-W.1.1.4:** Participate and promote financing and loan programs for residential and non-residential projects such as Property Assessed Clean Energy (PACE) programs, PG&E on-bill repayment, and California Hub for Energy Efficiency Financing (CHEEF) programs.

**E-W.1.1.5:** Through outreach and education, renters are guided on obtaining energy usage and efficiency information for rental units.

**E-W.1.1.6:** Promote energy audits for all residential, commercial, and municipal buildings through education and outreach.

### **E-W.1.2 Reduce municipal energy consumption through energy efficiency projects and behavioral and operational changes.**

#### **0 MTCO<sub>2</sub>e Emissions Reduction by 2030**

**E-W.1.2.1:** Periodically conduct energy efficiency audits at City buildings and facilities and implement recommended energy efficiency projects.



## E-W.2 Decarbonize residential and commercial buildings

- ▶ **Target: Increase residential and commercial solar installations**
- ▶ **Target: Decarbonize existing commercial and residential buildings to reduce natural gas consumption from existing commercial buildings by 19% and natural gas consumption from existing residential buildings by 25% by 2030 or reduce GHG emissions by 10,792 MTCO<sub>2</sub>e in existing commercial and residential buildings by 2030**
- ▶ **Target: Support Peninsula Clean Energy in providing 100% carbon-neutral electricity by 2030 and maintain a Peninsula Clean Energy opt-out rate of less than 2% for residential customers and less than 2% for commercial customers by 2030**
- ▶ **Target: Adopt a single margin energy score for new residential and commercial construction that exceeds the State's minimum standards by 2026**

Renewable energy sources, including solar, wind, geothermal, and small hydroelectric, are the cleanest and most environmentally friendly. According to data provided by Project Sunroof, 73% of Foster City's buildings have solar-viable roofs. Residents and business owners can purchase 100% renewable electricity from Peninsula Clean Energy (PCE) when solar is not an option. Transitioning from natural gas to electric appliances and heating systems is a healthier option. Numerous incentives and rebates are available to encourage replacing natural gas appliances with efficient electric versions, such as water heaters, furnaces, and cooking ranges. To achieve the City's long-term environmental goals, it will be necessary to switch most natural gas appliances and equipment in existing buildings to electric alternatives. Additionally, the cost of batteries is decreasing, making them an increasingly viable option. For those worried about power outages during Public Safety Power Shutoff events, combining solar energy with battery

storage is a cleaner and more sustainable alternative to generators powered by natural gas or other fuels. As the City moves towards decarbonizing buildings, it will be essential for utilities to enhance grid capacity, invest in electricity storage solutions, and maintain system reliability. Fortunately, the ongoing advancement in energy storage technologies is opening up new business prospects and paving the way for a future that relies entirely on electric power and 100% renewable energy sources.

### **E-W.2.1 Increase residential and commercial solar installations. 0 MTCO<sub>2</sub>e Emissions Reduction by 2030**

**E-W.2.1.1:** Provide financial incentives for solar PV and battery storage installations.

**E-W.2.1.2:** Encourage bulk purchases such as the Peninsula SunShares Program.

**E-W.2.1.3:** Provide free assistance for project developers through the Power Purchase Agreements (PPA) and interconnection process.

**E-W.2.1.4:** Update building codes, design guidelines, and zoning ordinances as necessary to facilitate further small, medium, and large-scale installations.

**E-W.2.1.5:** Encourage the installation of solar panels over parking areas on commercial projects and large-scale residential developments through ordinances, engagement campaigns, or agency incentives.

**E-W.2.1.6:** Identify and promote financing and loan programs for residential and non-residential projects.

**E-W.2.1.7:** Study opportunities and specific action steps to expand municipal rooftop solar and battery storage.

**E-W.2.1.8:** Provide education and outreach to stakeholders, including businesses, residents, and contractors, on the benefits of pairing battery storage with solar PV systems at City information centers like the permit counters.



**E-W.2.2 Decarbonize existing commercial and residential buildings to reduce natural gas consumption from existing commercial buildings by 19% and natural gas consumption from existing residential buildings by 25% by 2030 or reduce GHG emissions by 10,792 MTCO<sub>2</sub>e in existing commercial and residential buildings by 2030**

**-10,792 MTCO<sub>2</sub>e Emissions Reduction by 2030**

**E-W.2.2.1:** Adopt amendments to the Foster City Building Code for Green Building, Energy, and Plumbing during the Foster City Building Code 2025 cycle, including a two-way air conditioning ordinance.

**E-W.2.2.2:** Develop and implement a community-wide education and outreach campaign to provide information, incentives, benefits, and technical support for building electrification to increase voluntary adoption of all-electric technologies.

**E-W.2.2.3:** Work with clean energy providers like PCE and local installers to provide technical support to residents and businesses needing to replace gas appliances upon burnout.

**E-W.2.2.4:** Advocate for and require financial incentive programs for electrification to address fixed-income households (senior and non-senior), multi-family apartments, and restricted affordable residential units.

**E-W.2.2.5:** Promote awareness and understanding of electrification options to the construction industry and the community through education, outreach, and community partners.

**E-W.2.2.6:** Work with the County and regional partners, as appropriate, to create and/or implement a Home Ambassador electrification program and promote the program to the community.

**E-W.2.2.7:** Incentivize electric panel upgrades in existing residential and office buildings to accommodate all-electric technologies.

**E-W.2.3 Support Peninsula Clean Energy in providing 100% carbon-neutral electricity by 2030 and maintain a Peninsula Clean Energy opt-out rate of less than 2% for residential customers and less than 2% for commercial customers by 2030**

**-9,825 MTCO<sub>2</sub>e Emissions Reduction by 2030**

**E-W.2.3.1:** Until PCE's ECOplus becomes 100% renewable (estimated by 2025), promote and expand the community's participation in Peninsula Clean Energy's ECO100 product.

**E-W.2.3.2:** Collaborate with PCE and community-based organizations to conduct educational outreach to maintain the reduced opt-out rate levels in the community.

**E-W.2.4 Adopt a single source energy score for new residential and commercial construction that exceeds the State's minimum standards by 2026**

**-2,805 MTCO<sub>2</sub>e Emissions Reduction by 2030**

**E-W.2.4.1:** Adopt a single margin source energy score that exceeds state minimums for all applicable building types during the Foster City Building Code 2025 cycle.

## E-W.3 Reduce water consumption

**E-W.3.1 Reduce water consumption by 5% by 2030 and 15% by 2045**

**0 MTCO<sub>2</sub>e Emissions Reduction by 2030**

**E-W.3.1.1:** Continue to promote water conservation programs and incentives.



## What YOU Can Do

### For Energy Efficiency

- Replace indoor and outdoor lights with LED bulbs and turn them off when not in use.

### Have an energy assessment done for your home or business.

- Upgrade insulation, seal leaks, and install a programmable thermostat.
- Purchase Energy Star appliances and equipment.
- Unplug electronic appliances when not in use and set the thermostat to use less heat and air conditioning.

### For Decarbonization

- Replace appliances that use natural gas for ones that use electricity.
- Switch to PCE's 100% renewable electricity ECO100 product.
- Install a solar energy system on your home or business and consider battery storage.
- Investigate efficient heat pump technology so you can swap out water heaters and home heating systems that use natural gas when it's time to replace them.

## What is The City of Foster City Doing?

As part of its efforts to decarbonize ALL buildings in Foster City, municipal natural gas usage must decrease. In order to accomplish that goal, the City should develop a strategy to **reduce natural gas use by 35% by 2030**. The City can apply for electrification rebates and incentives, targeting appliance replacement with all-electric technology upon failure ('burnout'). Additionally, the City should seek out opportunities for information sharing, bulk purchasing, and collaboration with district stakeholders to promote decarbonization. The City can further its decarbonization goals by working with PG&E and PCE to transition backup generators from diesel to carbon-free sources including battery storage systems.

## Sector 2. Transportation & Land Use (T-L)

Between 2005 and 2019, the City reduced emissions from the transportation sector by 28% due to a decrease in vehicle miles traveled (VMT), improvements in fuel efficiency, and alternatively fueled cars. 57% of Foster City’s community-wide emissions come from the transportation sector. Reducing these emissions is a top priority to meet the City’s GHG emission reduction goals.

Alternative transportation rates have remained stagnant despite bicycle and pedestrian network improvements and public information campaigns to encourage residents to carpool, bike, walk, and take transit. As a result, the Climate Action Plan relies heavily on the promise of zero-emission vehicles (ZEVs) to meet its ambitious GHG reduction targets.

ZEVs include all-battery vehicles as well as plug-in electric hybrid vehicles. Foster City is a leader in ZEV adoption rates – ZEVs already make up approximately 9.27% of all registered vehicles in Foster City. The goal is to increase that rate to 31% by 2030 by building EV charging infrastructure and encouraging ZEV ownership through state and federal incentives and public education. This is an aggressive target, but one that complements the State’s goals to put 5 million ZEVs on the road by 2030 and to require all new passenger vehicles sold in California to be zero emission by 2035. Improvements in battery and charging technology, expected cost reductions, and automakers’ commitments to significantly expand ZEV offerings point to an all-electric future. Programs that incentivize used EV car purchases and installation of EV chargers in multifamily buildings can help ensure the benefits of EV ownership are shared by all.

### The Transportation and Land Use Big Goals

<b>T-L.1</b> <b>Reduce vehicle miles traveled in the City</b>	<b>T-L.2</b> <b>Decarbonize transportation</b>	<b>T-L.3</b> <b>Increase walkability and bike-ability</b>
<ul style="list-style-type: none"> <li>• <b>Target:</b> Reduce vehicle miles traveled commuting to work</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Target:</b> Increase passenger ZEV adoption to 31% by 2030 and commercial ZEV adoption to 25% by 2030</li> <li>• <b>Target:</b> Decarbonize 18% of off-road equipment and vehicle operations by 2030</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Target:</b> Encourage active transportation as an alternative to vehicular travel</li> </ul>





## T-L.1 Reduce vehicle miles traveled in the City

### ► **Target: Reduce vehicle miles traveled commuting to work**

Minimizing the use of vehicles powered by fossil fuels, especially by substituting them with transportation modes that enhance public health and quality of life, is a key strategy for reducing greenhouse gas (GHG) emissions. This shift connects communities and promotes the well-being of Foster City residents. Encouraging more active forms of transportation can lead to improved public health and quality of life due to increased physical activity and enhanced community connections. Additionally, it helps reduce traffic congestion and the demand for roads and parking spaces. Increasing access to and use of public and shared transit increases the community's access to economic opportunities and community connectivity while reducing the number of vehicle miles driven.

#### **T-L.1.1. Reduce vehicle miles traveled commuting to work**

##### **-0 MTCO<sub>2</sub>e Emissions Reduction by 2030**

**T-L.1.1.1:** Work with Commute.org and SamTrans to maximize ridership by making transit more frequent, accessible, cost-beneficial, and convenient through the expansion and/or improvement of transit routes, schedules, and bus shelters.

**T-L.1.1.2:** Work with all business owners to provide “first and last mile” programs to maximize utilization of public transit.

**T-L.1.1.3:** Continue collaborating with transit and transportation operators to develop shorter route shuttle programs serving residents, similar to Commute.org’s shuttle program.

**T-L.1.1.4:** Continue working with Commute.org, Metropolitan Transportation Commission (MTC), and the Bay Area Air Quality Management District (BAAQMD) to promote transportation demand programs to local employers, including rideshare matching programs, vanpool incentive programs, emergency ride home

programs, telecommuting, transit use discounts and subsidies, showers and changing facilities, bicycle racks and lockers, and other incentives to use transportation other than single occupant vehicles.

**T-L.1.1.5:** Work with MTC to identify and notify non-compliant businesses in Foster City and encourage their participation in providing transportation demand management programs.

**T-L.1.1.6:** Continue to require program support through City Development Agreements and Conditions of Approval.

## T-L.2 Decarbonize Transportation

### ► **Target: Increase passenger ZEV adoption to 31% and commercial ZEV adoption to 25% by 2030.**

### ► **Target: Decarbonize 18% of gas-powered equipment by 2030**

Electrifying the transportation sector will allow it to harness the benefits of increasingly clean electricity anticipated under SB 100. Furthermore, adopting electric vehicles (EVs) reduces tailpipe air pollution, thus offering significant public health advantages by cutting down a major source of outdoor air pollution. To reduce emissions in the transportation sector, three key areas need to be addressed: 1) lowering the carbon intensity of fuels, 2) enhancing vehicle efficiency, and 3) reducing vehicle miles traveled (VMT). Gasoline and diesel, the primary fuels for vehicles in the state, are characterized by high carbon intensity. Shifting to fuels with lower carbon intensity, particularly electricity, is crucial for emission reductions in transportation. As the electricity grid increasingly utilizes renewable energy sources, the environmental benefits of replacing gasoline and diesel vehicles with EVs grow. While the City cannot mandate its residents or businesses to buy zero-emission vehicles (ZEVs), it can facilitate this transition by providing adequate infrastructure and incentives to overcome barriers to ZEV adoption. Building out the public and private electric vehicle charging infrastructure is paramount to widespread ZEV adoption.



**T-L.2.1 Increase passenger ZEV adoption to 31% and commercial ZEV adoption to 25% by 2030****-19,581 MTCO<sub>2</sub>e Emissions Reduction by 2030**

**T-L.2.1.1:** Increase community knowledge of rebates and incentives for ZEV adoption.

**T-L.2.1.2:** As the state provides information, document the number of new-vehicle registrations for passenger vehicles that are for zero-emission vehicles (ZEVs), including plug-in electric vehicles (EVs) and hydrogen fuel cell electric vehicles, as a means of evaluating outreach effectiveness and in preparation for the State of California's restriction on the sale of gas-powered automobiles by 2035.

**T-L.2.1.3:** Institute and/or promote financial incentives that encourage using ZEVs and discourage using vehicles with internal combustion engines.

**T-L.2.1.4:** Pursue opportunities to expand the City's EV charging network by first identifying suitable Level 2 and DC fast charging locations on public land.

**T-L.2.1.5:** Facilitate public private partnerships and streamline permits to install 313 publicly accessible EV chargers in Foster City by 2030.

**T-L.2.1.6:** Participate in regional and coordinated local procurement, outreach, and planning initiatives.

**T-L.2.2 Decarbonize 18% of gas-powered equipment by 2030.****-2,594 MTCO<sub>2</sub>e Emissions Reduction by 2030**

**T-L.2.2.1:** Use code enforcement to help support CARB's Small Offroad Engine (SORE) ban on fossil fuel equipment use.

**T-L.2.2.2:** Develop an off-road incentive and technical assistance program for SORE users transitioning to ZEV.

**How many Electric Vehicle (EV) Charging Stations are required?**

The California Building Standards Commission (CBSC) published mandatory building standards requiring pre-wiring for EV charging station installation in parking spaces at one- and two-family dwellings with attached private garages, multi-family dwellings, commercial facilities, and public buildings in the California Green Building Standards Code within the California Building Standards Code. In cases where EV charging stations can simultaneously charge more than one vehicle, the number of EV charging stations provided shall be considered equivalent to the number of electric vehicles simultaneously charged. The California Energy Commission estimates that 1.01 million public and shared private chargers will be needed to support California's projected 7.1 million passenger plug-in EVs by 2030.

## T-L.3 Increase walkability and bike ability

► **Target: Increase the community's active transportation mode share to 4% by 2030**

The City can prioritize active transportation and micromobility by expanding access to safe and convenient biking and pedestrian infrastructure through implementing plans and programs, surveys of existing conditions, and advocacy.

### What is **Micromobility**?

Micromobility refers to forms of transportation, human-powered or electric, that can occupy space alongside bicycles. It includes electric scooters and skateboards, docked and dockless shared bikes, and other forms of small, lightweight devices operating at speeds typically below 20 mph. Micromobility devices do not have an internal combustion engine.

**T-L.3.1 Increase the community's active transportation mode share by 4% by 2030.**

**-100 MTCO<sub>2</sub>e Emissions Reduction by 2030**

**T-L.3.1.1:** Adopt a mobility priority policy with the General Plan as follows: 1) walk (persons with disabilities, pedestrians); 2) micro-mobility (including bicycles); 3) transit and shuttle; 4) drop-off and pick-up (ride share and taxi); and 5) auto (motorcycle, carpool/vanpool, carshare, and SOV).

**T-L.3.1.2:** Promote safe bicycling and micromobility through outreach channels and partner agencies, including e-bikes, electric scooters, and electric skateboards.

**T-L.3.1.3:** Continue regional collaboration efforts to establish a bike and/or scooter share program.

**T-L.3.1.4:** Enhance City policies to promote shared electric bikes and scooters

**T-L.3.1.5:** Pilot a program to provide free or reduced-price access to e-bikes or other micro-mobility options to low-income residents and students.

**T-L.3.1.6:** Continue supporting the Safe Routes to School Program and strive to increase bicycling, walking, carpooling, and public transit to school.

**T-L.3.1.7:** Improve curb management to prioritize rideshare parking/loading zones, scooter and bike share docks, bike parking, EV charging stations, and autonomous vehicle loading zones.



### What **YOU** Can Do

- Drive an electric or plug-in hybrid vehicle.
- Use electric landscape equipment.
- Bike, walk, or take transit whenever possible.
- Reduce your miles by working from home when possible and consolidating

### What is **The City of Foster City** Doing?

As part of our commitment to sustainability, Foster City has been integrating hybrid and all-electric sedans into our municipal fleet since 2008. We consistently assess the potential for alternative fuel options for all vehicles at the time of their scheduled replacement. In a significant step forward, in November 2023, we formed a partnership with Peninsula Clean Energy by joining their Public EV Fleets Program. This program is strategically designed to offer expert guidance and support to local governments in planning and implementing electric vehicle (EV) charging infrastructure and acquisitions. Through the Gov EV program, we receive complimentary technical assistance, project planning, and grant funding, which aids





### Sector 3: Waste and Consumption (W-C)

GHG accounting is directly concerned with emissions from the anaerobic decomposition of organic waste in landfills. The decomposition process creates methane, 28 times more potent as a GHG than carbon dioxide over 100 years. However, landfills capture most of the methane, and some use it to create biogas or electricity; about one-quarter of it escapes into the atmosphere.

Diverting organic material from the landfill is a clear and viable option for reducing these emissions. Paper and cardboard can be recycled. Food scraps, soiled paper (like napkins and paper towels), and yard waste can be composted at home or a commercial organic processing facility. Surplus food can be donated to non-profits that distribute it to those in need.

Local measures support state legislation to reduce emissions from organic waste disposal significantly. Senate Bill (SB) 1383 establishes a target to achieve a 75% reduction in statewide waste disposal from the 2014 level by 2025. The law also establishes a target that not less than 20% of currently disposed edible food is recovered for human consumption by 2025. On January 1, 2024, CalRecycle required local jurisdictions to impose penalties for non-compliance on regulated entities subject to their authority.

### The Waste and Consumption Big Goals

#### W-C.1 Increase diversion of materials from landfills

- **Target:** Significantly reduce organic waste to landfills
- **Target:** Annually procure and apply 2,500 tons of compost by 2030

#### W-C.1.1 Significantly reduce organic waste to landfills

##### 0 MTCO<sub>2</sub>e Emissions Reduction by 2030

**W-C.1.1.1:** Achieve increased waste diversion through a combination of efforts, including promoting traditional recycling and organics recycling and local enforcement of recycling requirements.

**W-C.1.1.2:** Regular residential and commercial waste audits and characterization studies are required to identify opportunities for increased diversion and track progress in meeting targets.

**W-C.1.1.3:** Promote reuse, repair, and recycling of inorganic materials and encourage reduced use of packaging and single-use items through engagement campaigns.

**W-C.1.1.4:** Consider adopting a City policy to require all City Events (those sponsored by or using City facilities) to be zero-waste events.

**W-C.1.1.5:** Embark on an educational campaign to increase recycling, composting, reuse, and waste reduction within municipal operations at public facilities.

#### W-C.1.2 Annually procure and apply 2,500 tons of compost by 2030

##### -991 MTCO<sub>2</sub>e Emissions Reduction by 2030

**W-C.1.2.1:** Align with and exceed SB 1383 requirements to procure and apply 2,500 tons of compost annually by 2030.

**W-C.1.2.2:** Collaborate with San Mateo County to identify locations to apply compost if locations within the City cannot be identified.



### What **YOU** Can Do

- Buy only as much as you need.
- Buy locally grown food and eat less meat.
- Put your food scraps in the green can and/or compost them at home.
- Donate extra food and used clothing and housewares.
- Don't be a "wishful" recycler. Be scrupulous about how you sort your recyclables.



## Sector 4. Climate Resiliency and Leadership (C-L)

California is already experiencing the effects of climate change. Every year, it seems like the news gets grimmer: more wildfires, more Average annual average air temperatures have already increased by almost 2° F in California, which will likely double even if the world can reduce emissions by 80% by 2050. Foster City needs to be prepared for the likely impacts of climate change, including flooding from more intense storms, rising sea levels, and the health impacts from heat exposure and poor air quality. The sea level in San Francisco Bay has risen about 9 inches since 1900 and is expected to rise another 10 inches by 2040.

Within this short period, key access routes, public facilities, and commercial areas in the low-lying areas could experience flooding. While this Plan contains some measures that address adaptation, the Foster City Local Hazard Mitigation Plan contains a more complete set of goals, policies, and programs.

The City of Foster City must continue to be a leader in encouraging the behavioral changes needed to meet its community's climate goals.

### The Climate Resiliency and Leadership Big Goals

#### C-L.1

#### Educate and support the whole community to live sustainably

- **Target:** Collaborate with stakeholders to create Local Climate Action Programs that empower individuals to make behavioral changes.

#### C-L.2

#### Prepare for and adapt to a rising sea level and climate change

- **Target:** Develop adaptation strategies to assist the Foster City community with the effects of climate change.







**C-L.1.1.1 Collaborate with stakeholders to create Local Climate Action Programs that empower individuals to make behavioral changes.**

**0 MTCO<sub>2e</sub> Emissions Reduction by 2030**

**C-L.1.1.1:** Require all new municipal buildings and facilities to meet minimum LEED silver standards outlined by the US Green Building Council or equivalent green building rating system. Require feasibility studies for zero net energy use, on-site renewable energy generation, and on-site batteries for municipal buildings and facilities.

**C-L.1.1.2:** Create robust education and marketing Climate Action Programs to support the Community's sustainability goals.

**C-L.1.1.3:** Regularly benchmark the environmental performance of municipal buildings, landscaping, parks, and facilities, including energy and water use.

**C-L.1.1.4:** Track and report progress towards achieving the City's greenhouse gas reduction goal - creating and updating a Climate Action Dashboard for Community use.

**C-L.1.1.5:** Prepare an inventory of emissions from municipal operations every five years, establish a GHG reduction target, and develop a work plan to reduce municipal emissions to achieve an 85% emissions reduction below 2005 levels by 2045.

**C-L.1.1.6:** Seek funding opportunities to support the implementation of greenhouse gas reduction projects, exploring grant funding, rebates, and other incentive opportunities.

**C-L.2.1 Develop adaptation strategies to assist the Foster City community with the effects of climate change.**

**0 MTCO<sub>2e</sub> Emissions Reduction by 2030**

**C-L.2.1.1:** Coordinate and integrate climate adaptation planning consistently throughout related City plans, including but not limited to the General Plan and its Safety Element, Local Hazard Mitigation Plan (LHMP), sea level rise adaptation plans, and emergency and capital improvement plans.

**C-L.2.1.2:** Ensure fair and robust inclusion of lower-income households and diverse communities in the planning and response to climate change impacts, including sea level rise, wildfire, public health, and emergency preparedness.

**C-L.2.1.3:** Seek opportunities to increase the City's tree canopy to combat extreme heat.



## Section 6. Conclusion

Foster City's Climate Action Plan (CAP) creates a dynamic framework that positions the City on a trajectory towards achieving a 50 percent reduction in greenhouse gas (GHG) emissions relative to 2005 levels by 2030. However, the publication of this plan represents merely an initial step. Paramount to its success is the ongoing revitalization and adaptation of the plan, necessitating periodic updates to incorporate technological advancements and policy shifts.

The significance of the CAP extends beyond the municipal endeavor to regulate its emissions. It serves as a clarion call to the entirety of the community - encompassing residents, educational institutions, and businesses - to actively participate in forging a future characterized by low carbon emissions and environmental purity. The progression of this plan not only facilitates the reduction of emissions but also contributes to the fortification of the local economy, enhances the City's resilience, and fosters the development of a community that is both sustainable and conducive to quality living for current and forthcoming generations. The overarching aim is to ensure that Foster City maintains its status as an exemplary place of residence, both presently and in the years to come.

### Implementation and Monitoring

Plans are only effective if implemented and results are carefully evaluated. The City will prepare and report to the public an annual assessment of its progress in implementing the actions contained in this Climate Action Plan and continue to quantify community and government operations' GHG emissions to determine if the City is on track to meet its reduction targets. The Climate Action Plan Update Implementation Plan is located in Appendix.



### Funding

The steps outlined in this Climate Action Plan (CAP) aren't just about finding the cheapest way to hit the greenhouse gas (GHG) targets in Foster City. These actions were chosen because they fit well with what's happening locally and what the community cares about. Plus, they bring a bunch of extra perks besides just cutting emissions. Following this, climate action plans can also be beneficial to the economy. CAPs can help grow local green businesses, create jobs, and even save money for people and companies in Foster City.

Take, for example, making it safer to walk and bike and improving public transit. Not only does this make getting around cheaper, but it also encourages everyone to be more active, which is great for community health. This plan works toward a greener city and a healthier, more vibrant community.

Funding for the first year is available in two separate City accounts; however, long-term funding strategies will be necessary to sustain the Climate Action Plan 2024 Update in future years.



An aerial photograph of a city, likely Foster City, California, showing a dense residential and commercial area with a prominent waterway (the San Bruno River) winding through it. The image is overlaid with a semi-transparent blue filter. A thick, horizontal green bar spans across the middle of the page, positioned below the first line of text and above the second line of text.

City of Foster City Climate Action Plan

# Appendix A

Climate Regulatory Context





## Appendix A. Climate Regulatory Context

As the impacts of climate change are being recognized, many strategies that address climate change have emerged at several levels of government. This appendix provides an overview of the international, State, and local regulatory context relative to Foster City's actions toward reducing its communitywide greenhouse gas (GHG) emissions.

### International Climate Action Guidance

#### 1992 United Nations Framework Convention on Climate Change

The United Nations Framework Convention on Climate Change Paris Agreement (UNFCCC) is the primary international regulatory framework for GHG reduction. The UNFCCC is an international treaty adopted in 1992 to stabilize atmospheric GHG concentrations to prevent disruptive anthropogenic climate change. The framework established non-binding limits on global GHG emissions and specified a process for negotiating future international climate-related agreements.<sup>12</sup>

#### 1997 Kyoto Protocol

The Kyoto Protocol is an international treaty adopted in 1997 to extend and operationalize the UNFCCC. The protocol commits industrialized nations to reduce GHG emissions per county-specific targets, recognizing that they hold responsibility for existing atmospheric GHG levels. The Kyoto Protocol involves two commitment periods during which emissions reductions are to occur, the first of which took place between 2008-2012 and the second of which has not entered into force.<sup>13</sup>

#### 2015 The Paris Agreement

The Paris Agreement is the first-ever universal, legally binding global climate agreement adopted in 2015 and ratified by 189 countries worldwide. The Paris Agreement establishes a roadmap to keep the world under 2° C of warming to limit an increase of temperature to 1.5° C. The agreement does not dictate one specific reduction target; instead, it relies on individual countries to set nationally determined contributions (NDCs) or reductions based on GDP and other factors. According to the International Panel on Climate Change (IPCC), limiting global warming to 1.5° C will require global emissions to be reduced through 2030 and hit carbon neutrality by mid-century.<sup>14</sup>

### California Policy and Regulatory Context

California remains a global leader in the effort to reduce GHG emissions and combat climate change through its mitigation and adaptation strategies. With the passage of Assembly Bill (AB) 32 in 2006, California became the first state in the United States to mandate GHG emission reductions across its entire economy. To support AB 32, California has enacted legislation, regulations, and executive orders (EO) that put it on course to achieve robust emission reductions and address the impacts of a changing climate.

12 United Nations Framework Convention on Climate Change (UNFCCC). United Nations Framework Convention on Climate Change. [https://unfccc.int/files/essential\\_background/background\\_publications\\_htmlpdf/application/pdf/conveng.pdf](https://unfccc.int/files/essential_background/background_publications_htmlpdf/application/pdf/conveng.pdf)

13 UNFCCC. What is the Kyoto Protocol? [https://unfccc.int/kyoto\\_protocol](https://unfccc.int/kyoto_protocol)

14 UNFCCC. Paris Agreement - Status of Ratification. <https://unfccc.int/process/the-paris-agreement/status-of-ratification>



The following is a summary of executive and legislative actions most relevant to the CAP.

### **2002 Senate Bill 1078**

In 2002, SB 1078, established the California Renewables Portfolio Standards (RPS) Program, accelerated in 2006 by SB 107, requiring 20 percent of retail electricity sales be composed of renewable energy sources by 2010. EO S-14-08 was signed in 2008 to further streamline California's renewable energy project approval process and increase the State's RPS to the most aggressive in the nation at 33 percent renewable power by 2020.

### **2002 Assembly Bill 1493**

In 2002, AB 1493, also known as the Pavley Regulations, directed the California Air Resources Board (CARB) to establish regulations to reduce GHG emissions from passenger vehicles to the maximum and most cost-effective extent feasible. CARB approved the first set of regulations to reduce GHG emissions from passenger vehicles in 2004, initially taking effect with the 2009 model year.

### **2005 Executive Order S-3-05**

Executive Order (EO) S-3-05 was signed in 2005, establishing Statewide GHG emissions reduction targets for 2020 and 2050. The EO calls for reducing GHG emissions in California to 2000 levels by 2010, 1990 levels by 2020, and 80 percent below 1990 levels by 2050. The 2050 emission reduction target would put the State's emissions in line with the worldwide reductions needed to reach long-term climate stabilization as concluded by the IPCC 2007 Fourth Assessment Report.

### **2006 Assembly Bill 32**

California's major initiative for reducing GHG emissions is outlined in AB 32, the "California Global Warming Solutions Act of 2006," which was signed into law in 2006. AB 32 codifies the Statewide goal

of reducing GHG emissions to 1990 levels by 2020. It requires the California Resource Board (CARB) to prepare a Scoping Plan that outlines the main State strategies for reducing GHG emissions to meet the 2020 deadline. In addition, AB 32 requires CARB to adopt regulations to require reporting and verification of Statewide GHG emissions.

Based on this guidance, CARB approved a 1990 Statewide GHG baseline and 2020 emissions limit of 427 million metric tons of CO<sub>2</sub> equivalent (MMT CO<sub>2</sub>e). CARB approved the Scoping Plan on December 11, 2008. It included measures to address GHG emission reduction strategies related to energy efficiency, water use, and recycling and solid waste, among other measures. Many of the GHG reduction measures included in the Scoping Plan (e.g., Low Carbon Fuel Standard, Advanced Clean Car standards<sup>13F</sup>, and Cap-and-Trade) have been adopted since approval of the Scoping Plan.

In May 2014, CARB approved the first update to the AB 32 Scoping Plan. The 2014 Scoping Plan update defined CARB's climate change priorities for the next five years and set the groundwork to reach post-2020 Statewide goals. The update highlighted California's progress toward meeting the "near-term" 2020 GHG emission reduction goals defined in the original Scoping Plan. It also evaluated how to align the State's longer-term GHG reduction strategies with other State policy priorities, including those for water, waste, natural resources, clean energy, transportation, and land use (CARB 2014).

### **2007 Executive Order S-1-07**

Also known as the Low Carbon Fuel Standard, EO S-1-07, issued in 2007, established a Statewide goal that requires transportation fuel providers to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020. EO S-1-07 was readopted and amended in 2015 to require a 20 percent reduction in carbon intensity by 2030, the most stringent requirement in the nation. The new requirement aligns with California's overall 2030 target of



reducing climate changing emissions 40 percent below 1990 levels by 2030, which was set by Senate Bill 32 and signed by the governor in 2016.

### **2007 Senate Bill 97**

Signed in August 2007, SB 97 acknowledges that climate change is an environmental issue that requires analysis in California Environmental Quality Act (CEQA) documents. In March 2010, the California Natural Resources Agency adopted amendments to the State CEQA Guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions. The adopted guidelines give lead agencies the discretion to set quantitative or qualitative thresholds for assessing and mitigating GHG and climate change impacts.

### **2008 Senate Bill 375**

SB 375, signed in August 2008, enhances the State's ability to reach AB 32 goals by directing CARB to develop regional GHG emission reduction targets to be achieved from passenger vehicles by 2020 and 2035. In addition, SB 375 directs each of the State's 18 major Metropolitan Planning Organizations (MPOs), including the Metropolitan Transportation Commission (MTC), to prepare a "sustainable communities strategy" (SCS) that contains a growth strategy to meet these emission targets for inclusion in the MPO's Regional Transportation Plan (RTP). On March 22, 2018, CARB adopted updated regional targets for reducing GHG emissions from 2005 levels by 2020 and 2035.

### **2009 California Green Building Code**

The California Green Building Standards Code (CALGreen) is Part 11 of the California Building Standards Code or Title 24 and is the first Statewide "green" building code in the nation. The purpose of CALGreen is to improve public health, safety, and general welfare by enhancing the design and construction of buildings. Enhancements include reduced negative impact designs, positive environmental impact designs, and encouragement of sustainable construction

practices. The first CALGreen Code was adopted in 2009 and has been updated in 2013, 2016, and 2019. The CALGreen Code will have subsequent, and continually more stringent, updates every three years.

### **2009 Senate Bill X7-7**

In 2009, SB X7-7, also known as the Water Conservation Act, was signed, requiring all water suppliers to increase water use efficiency. This legislation aims to reduce per capita urban water use by 20 percent by 2020.

### **2011 Senate Bill 2X**

In 2011, SB 2X was signed, requiring California energy providers to buy (or generate) 33 percent of their electricity from renewable energy sources by 2020.

### **2012 Assembly Bill 341**

AB 341 directed the California Department of Resources Recycling and Recovery (CalRecycle) to develop and adopt regulations for mandatory commercial recycling. As of July 2012, businesses are required to recycle, and jurisdictions must implement a program that includes education, outreach, and monitoring. AB 341 also set a Statewide goal of 75 percent waste diversion by 2020.

### **2014 Assembly Bill 32 Scoping Plan Update**

In 2014, CARB approved the first update to the Scoping Plan. This update defines CARB's climate change priorities and sets the groundwork to reach the post-2020 targets set forth in EO S-3-05. The update highlights California's progress toward meeting the near-term 2020 GHG emissions reduction target, defined in the original Scoping Plan. It also evaluates how to align California's longer-term GHG reduction strategies with other Statewide policy priorities, such as water, waste, natural resources, clean energy, transportation, and land use.





### 2014 Assembly Bill 1826

AB 1826 was signed in 2014 to increase the recycling of organic material. GHG emissions produced by the decomposition of these materials in landfills were identified as a significant source of emissions contributing to climate change. Therefore, reducing organic waste and increasing composting and mulching are goals set out by the AB 32 Scoping Plan. AB 1826 specifically requires jurisdictions to establish organic waste recycling programs by 2016, and phases in mandatory commercial organic waste recycling over time.

### 2015 Senate Bill 350

SB 350, the Clean Energy and Pollution Reduction Act of 2015, has two objectives: to increase the procurement of electricity from renewable sources from 33 percent to 50 percent by 2030 and to double the energy efficiency of electricity and natural gas end users through energy efficiency and conservation.

In 2015, EO B-30-15 was signed, establishing an interim GHG emissions reduction target to reduce emissions to 40 percent below 1990 levels by 2030. The EO also calls for another update to the CARB Scoping Plan.

### 2016 Senate Bill 32

On September 8, 2016, the governor signed SB 32 into law, extending AB 32 by requiring the State to further reduce GHGs to 40 percent below 1990 levels by 2030 (the other provisions of AB 32 remain unchanged). The bill charges CARB to adopt the regulation so that the maximum technologically feasible emissions reductions are achieved in the most cost-effective way.

### 2016 Senate Bill 1383

Adopted in September 2016, SB 1383 requires CARB to approve and begin implementing a comprehensive strategy to reduce

emissions of short-lived climate pollutants. The bill requires the strategy to achieve the following reduction targets by 2030:

- Methane - 40 percent below 2013 levels
- Hydrofluorocarbons - 40 percent below 2013 levels
- Anthropogenic black carbon - 50 percent below 2013 levels

SB 1383 also requires the CalRecycle, in consultation with the CARB, to adopt regulations that achieve specified targets for reducing organic waste in landfills. The bill further requires 20% of edible food disposed of at the time to be recovered by 2025.

### 2017 Scoping Plan Update

On December 14, 2017, CARB adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 goal set by SB 32. The 2017 Scoping Plan relies on the continuation and expansion of existing policies and regulations, such as the Cap-and-Trade Program, as well as implementation of recently adopted policies, such as SB 350 and SB 1383 .

The 2017 Scoping Plan also puts an increased emphasis on innovation, adoption of existing technology, and strategic investment to support its strategies. As with the 2014 Scoping Plan Update, the 2017 Scoping Plan does not provide project-level thresholds for land use development. Instead, it recommends that local governments adopt policies and locally appropriate quantitative thresholds consistent with Statewide per capita goals of six metric tons (MT) CO<sub>2</sub>e by 2030 and two MT CO<sub>2</sub>e by 2050 (CARB 2017). As stated in the 2017 Scoping Plan, these goals may be appropriate for plan-level analyses (city, county, subregional, or regional level), but not for specific individual projects because they include all emissions sectors in the State.



### 2018 Senate Bill 100

Adopted on September 10, 2018, SB 100 supports the reduction of GHG emissions from the electricity sector by accelerating the State's Renewables Portfolio Standard Program, which was last updated by SB 350 in 2015. SB 100 requires electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045.

Also, on September 10, 2018, the governor issued Executive Order B-55-18, which established a new Statewide goal of achieving carbon neutrality by 2045 and maintaining net negative emissions thereafter. This goal is in addition to the existing Statewide GHG reduction targets established by SB 375, SB 32, SB 1383, and SB 100.

### 2022 Assembly Bill 1279

In 2022, California passed AB 1279, which mandates the state to reach "net zero greenhouse gas emissions" at the earliest possible time, with a deadline of no later than 2045. Following this, the state must then attain and sustain net negative GHG emissions. It also requires that statewide anthropogenic GHG emissions be reduced to at least 85% below 1990 levels.

## State-Level Programs

In addition to State regulations that determine GHG Reduction Targets, the following programs assist Cities in meeting their climate goals. These programs also impact the Adjusted Emissions Reduction Target (see Section 4: GHG Emissions Inventory).

### California Advanced Clean Cars Program

In 2012, CARB adopted a set of regulations to control emissions from passenger vehicles, collectively called Advanced Clean

Cars. The program was developed in coordination with the U.S. EPA and National Highway Traffic Safety Administration (NHTSA) and combines the control of smog-causing pollutants and GHG emissions into a single coordinated package of regulations. <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program>

### California Low Carbon Fuel Standard Program

The Low Carbon Fuel Standard (LCFS) is designed to encourage the use of low-carbon fuels, encourage the production of those fuels, and therefore, reduce GHG emissions. Currently, the LCFS calls for a 20 percent decline in the carbon intensity of diesel fuels below 2010 levels by 2030. <https://ww2.arb.ca.gov/our-work/programs/low-carbon-fuel-standard>

### California Renewable Portfolio Standard

The Renewable Portfolio Standard (RPS), originally established in 2002, required 20 percent of electricity retail sales to be served by renewable sources by 2017. The program was accelerated in 2015 with SB 350, which mandated a 50 percent RPS by 2030. SB 100, enacted in 2018, accelerated the program further, establishing renewable energy targets of 50 percent by 2026, 60 percent by 2030, and 100 percent by 2045. <https://www.cpuc.ca.gov/rps>

### California Long Term Energy Efficiency Strategic Plan

Published in 2008 and updated in 2011, the California Long Term Energy Efficiency Strategic Plan outlines goals and strategies for key market sectors (i.e., commercial, residential, industrial, and agricultural) and crosscutting initiatives (e.g., heating, ventilation and air conditioning, codes and standards, research, and technology). While the Plan has not been updated since 2011, it is still referenced in numerous State documents and reports. The Plan embraces four specific programmatic goals, known as the Big Bold Energy Efficiency Strategies. These goals are:

- All new residential construction in California will be zero net



energy by 2020.

- All new commercial construction in California will be zero net energy by 2030.
- The Heating, Venting and Air Conditioning (HVAC) industry will be re-shaped to deliver maximum performance HVAC systems.
- All eligible low-income customers will have an opportunity to participate in the LIEE program and will be provided all cost-effective energy efficiency measures in their residences by 2020.

More information on California's zero net energy goals can be found online at: <https://www.cpuc.ca.gov/ZNE>

## Local Policy

### 2019 San Mateo County Climate Emergency

In September 2019, the San Mateo County Board of Supervisors adopted a resolution declaring a climate emergency in San Mateo County to highlight the increasingly urgent need for action to address the climate crisis. The County of San Mateo joined over 1,000 national, international, and local jurisdictions with similar declarations. The resolution calls for the County to create climate action plans (CAPs) for its government operations and unincorporated community that will achieve carbon neutrality in advance of the State of California's 2045 goal, and coordinate with the cities and other local partners in addressing the climate crisis.

### 2022 California Green Building Code (CALGreen)

Title 24 of the California Building Standards Code includes CALGreen as Part 11 of its 13-part code. In 2022, Foster City adopted CalGreen, which establishes baseline standards for building construction. Since 2016, CalGreen has been applied to all new buildings, as well as changes or additions that expand the size of residential buildings and additions to nonresidential buildings. The goal of CalGreen is to reduce environmental impacts by enforcing specific standards throughout a building's lifecycle. It promotes eco-friendly building practices in several key areas:

- Planning and Design
- Energy Efficiency
- Water Efficiency and Conservation
- Material Conservation and Resource Efficiency
- Environmental Quality



An aerial photograph of a city, likely Foster City, is shown with a semi-transparent blue overlay. A thick, horizontal green bar spans across the middle of the image. Text is overlaid on the image in white and green colors.

**City of Foster City Climate Action Plan**

# **Appendix B**

**Glossary of Abbreviations**





## Appendix B. Glossary of Abbreviations

<b>AB 32</b>	Assembly Bill 32, The California Global Warming Solutions Act of 2006
<b>BAAQMD</b>	Bay Area Air Quality Management District
<b>CARB</b>	California Air Resources Board
<b>CAP</b>	Climate action plan
<b>CEC</b>	California Energy Commission
<b>CEQA</b>	California Environmental Quality Act
<b>CO<sub>2</sub></b>	Carbon dioxide
<b>CO<sub>2</sub>e</b>	Carbon dioxide equivalent
<b>CPUC</b>	California Public Utilities Commission
<b>EV</b>	Electric vehicle
<b>GHG</b>	Greenhouse gas
<b>ICLEI</b>	Local Governments for Sustainability
<b>IPCC</b>	Intergovernmental Panel on Climate Change
<b>KPI</b>	Key performance indicator
<b>kWh</b>	kilowatt hour
<b>MT</b>	Metric ton
<b>MMT</b>	Million metric tons
<b>PCE</b>	Peninsula Clean Energy
<b>PG&amp;E</b>	Pacific Gas and Electric Company
<b>RPS</b>	Renewable portfolio standard
<b>TOD</b>	Transit-oriented development
<b>U.S. EPA</b>	United States Environmental Protection Agency
<b>VMT</b>	Vehicle miles traveled
<b>WRI</b>	World Resources Institute



An aerial photograph of a city, likely Foster City, California, showing a dense residential area with a winding river or canal system. The image is overlaid with a semi-transparent blue filter. A thick, horizontal green bar is positioned below the first line of text.

**City of Foster City Climate Action Plan**

# **Appendix C**

**Community Engagement**



## Foster City 2023 CAP Engagement Summary



The **Foster City Climate Action Plan (CAP)** development began in September 2022. Community engagement was a critical component of CAP development, steering the priorities, goals and strategies from the beginning. Over the course of one year (September 2022 - September 2023) the Foster City CAP project team conducted outreach and engagement to understand community priorities and concerns.

### PLANNING

In September 2022, the project team began engagement planning by developing a **Community Engagement Plan**. The Community Engagement Plan outlined objectives, key audiences, Foster City demographics, and a strategic framework and strategies for engaging and hearing from Foster City communities.

The Community Engagement Plan identified the following key goals:

- *Reflect community perspectives, priorities, and values for a community-oriented plan* that is representative of the geographically rich and diverse communities of Foster City.
- *Educate, empower, and energize the Foster City communities* to cultivate a shared understanding around climate change and inspire action.
- *Create a framework for community action* that clearly outlines how Foster City residents and businesses can take ownership in the CAP.
- *Strengthen City relationships with communities and partners* to facilitate and coordinate opportunities to collaborate and meet shared priorities.

Additionally, the project team identified community touchpoints and engagement activities, developed a timeline, crafted key messages, and created a style guide and graphics, refreshed the project webpage, and developed additional materials to facilitate engagement.

### CITIZEN SUSTAINABILITY ADVISORY COMMITTEE

The **Citizens Sustainability Advisory Committee (CSAC)** played a critical role in planning for and conducting outreach to ensure the CAP aligned with and supported Foster City community vision.



The CSAC serves in an advisory capacity on sustainability issues facing Foster City regarding environmental, economic, or social sustainability. The CSAC is made up of five Foster City Resident voting member seats; two Foster City resident youth voting member seats; two in-town business voting member seats, one of which should be from one of the City's major employers and of which should be from one of the City's

small businesses; and one in-town non-profit voting member seat.

The CSAC was a trusted messenger and key intermediary to the broader Foster City community throughout the climate planning process and beyond. As members of Foster City communities, CSAC members helped to facilitate critical connections and collect critical feedback.

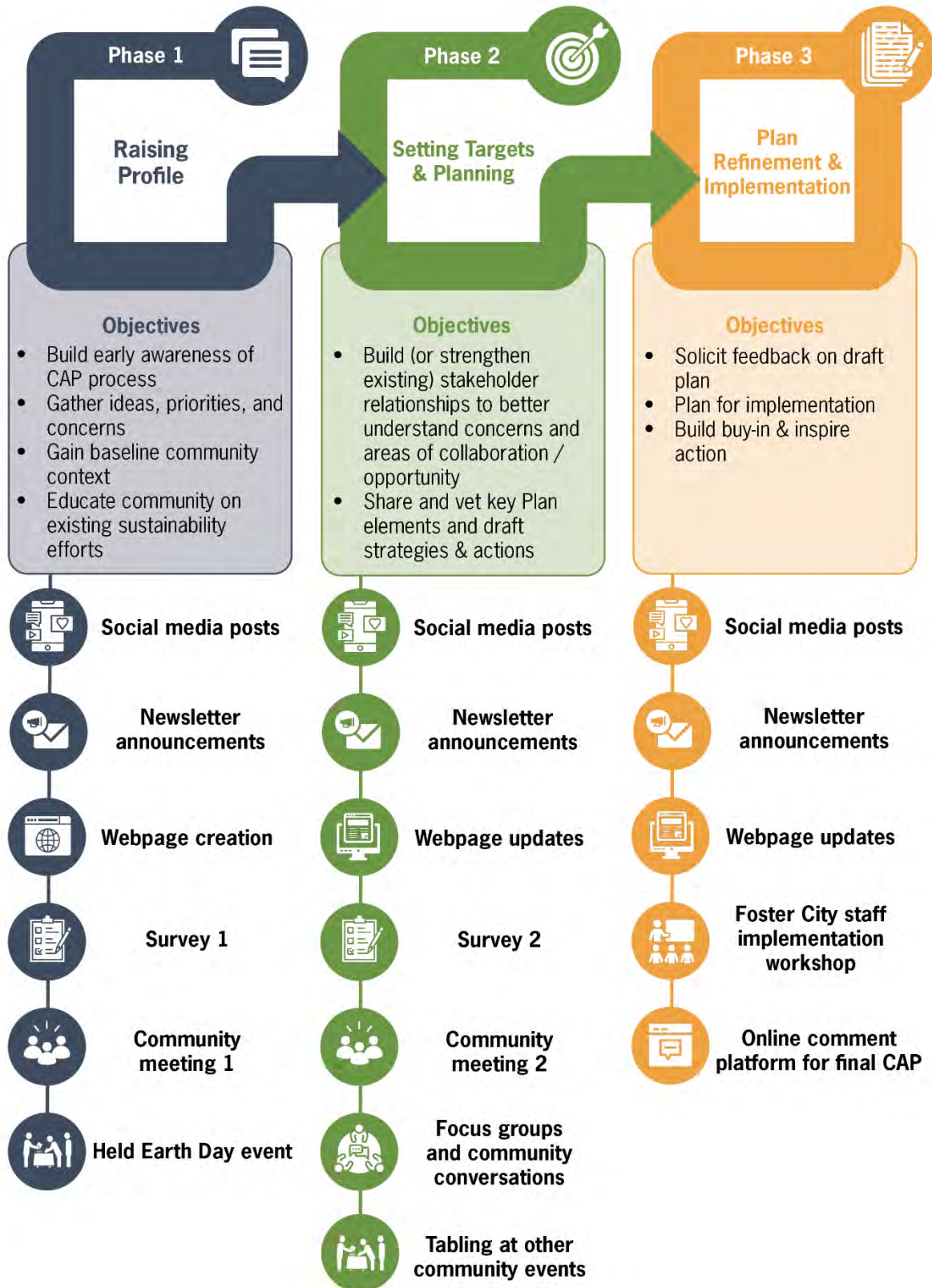
All CSAC members participated in facilitation trainings to serve as discussion leaders during the community workshops. Additionally, CSAC members planned, promoted, and facilitated all focus groups and community conversations.

## Engagement Timeline

The CAP project team engaged Foster City communities at three critical points during Plan development. Engagement activities included surveys, workshops, social media and newsletter updates, focus groups, community conversations, and more.

# Foster City 2024 Climate Action Plan Update

Figure 1. Engagement Plan Timeline





## Engagement Activities

The CAP project team used many different types of activities and avenues to meaningfully reach Foster City community members and gather their feedback on CAP priorities and strategies.

**Figure 2. CAP Engagement by the Numbers**



## Foster City 2024 Climate Action Plan Update

### COMMUNITY SURVEYS

Two community-wide, online surveys gathered community input on Plan vision, priorities, draft strategies and collect new ideas. Community feedback collected through the surveys helped to refine the Plan during development, understand levels of community support and revise strategies. Both surveys launched in coordination with the Community Meetings, published on the project webpage and promoted through City social media and newsletters.

- **Survey 1: Build awareness and understand priorities (December 12, 2022 - January 29, 2023).** Survey 1's intention was to gain a deeper understanding of community's vision for a sustainable Foster City and top priorities for the CAP.
- **Survey 2: Refine and develop strategies (May 11 - July 7, 2023).** Survey 2 focused on collecting community feedback on draft strategies and actions for the CAP, to understand where there is community support and concern, and to collect new ideas for strategies.

### COMMUNITY MEETINGS

We hosted two online community meetings to share CAP updates and hear directly from Foster City community members. The meetings built on momentum from the online surveys and provided an opportunity for community members to hear directly from the project team, interact with other Foster City community members, and provide real-time feedback on draft Plan elements.

- **Community Meeting 1: Build awareness and understand priorities (January 12, 2023).** Meeting 1 gathered community priorities and values that directly shaped the CAP development in early planning stages. Meeting 1 also shared other feedback opportunities for Foster City community members, and gained a deeper understanding of how community envisions a resilient, sustainable, and equitable Foster City.
- **Community Meeting 2: Refine and develop strategies (March 21, 2023).** Community Meeting 2 presented and discussed draft CAP strategies. Participants heard from the project team about strategies being considered, asked questions, stated their priorities and concerns, and brainstormed new strategy ideas.

### FOCUS GROUPS AND COMMUNITY CONVERSATIONS

Focus groups and community conversations ensured that we heard from typically harder to reach, highly impacted residents and communities on CAP strategies and

## Foster City 2024 Climate Action Plan Update

actions. We designed the discussion guides to gather feedback on how members of our priority communities envision a sustainable Foster City, what their top priorities are for climate action, what challenges they envision facing regarding climate impacts and taking action, and lastly, what opportunities or new ideas do they have that the City can support.

CSAC members conducted recruitment, outreach, and facilitation of all focus groups and community conversations. Focus groups and community conversations took place over 3 months, from June to August 2023, and were held in-person and virtually.

- **Focus groups** were structured 1-hour long discussions. CSAC members recruited community participants, selected a location and time, and used a discussion guide to facilitate the discussion. Each focus group discussion included a CSAC notetaker and facilitator. These discussions were primarily focused on Climate Action Planning and Draft CAP strategies.
- **Community conversations** were informal conversations held between CSAC members and Foster City community members at existing events, community gathering spaces, and tabling at events. These conversations were shorter in nature and CSAC members used a community conversations handout to guide the discussion and record notes. These conversations were focused on individual current climate actions, challenges and barriers to making behavioral changes, and if they had more questions about climate action.

### ONLINE COMMENT PLATFORM

We will use an accessible online sharing and public comment platform to collect feedback on the draft CAP from the public and different stakeholder groups.

### STAFF WORKSHOP

Lastly, we will host a City Staff Implementation workshop to meet with the staff across departments who will be responsible for directing and ensuring CAP implementation.

## What We Heard

Below we've outlined key themes, priorities, concerns, and strategy-specific feedback heard directly from Foster City communities throughout the engagement process. Across all community touchpoints, there was strong consensus from Foster City



community members that they are **energized to take climate action to protect and restore the environment of Foster City.**

### PHASE 1: Raising Profile

#### SURVEY 1

- The **large majority (87%)** of respondents in Foster City were **satisfied with the quality of life** in Foster City and would recommend the city as a place to live. Respondents aged 18-34, Asian respondents, and respondents making between \$100K-\$300K a year were more satisfied than other analyzed groups.
- Over **85% of respondents** were **satisfied with the city's parks and recreational amenities**, the overall cleanliness and maintenance, and the overall safety. However, only 31% were satisfied with the availability of jobs, 20% were satisfied with the of public transportation, and 15% were satisfied with the affordable housing situation.
- 84% of respondents had heard of the Levee improvements project and **56% had heard of the initiative to complete bike and pedestrian improvements**. Less than half the respondents had heard of other city environmental initiatives. Overall, respondents aged 18-34 were less likely than other groups to be aware of the city's environmental initiatives.
- **59% of respondents were satisfied with the city's efforts to become more environmentally sustainable**. Respondents would most like to see the city prioritize making it easier to walk or bike in the city (46%) and use more clear or renewable energy (41%).
- **Over half the respondents** across all analyzed demographic **groups bring reusable bags to the store** and purchase reusable items instead of single-use. Over 20% of respondents would consider installing solar panels, using alternatives to cars, insulating homes, and growing fruit and vegetables despite not many respondents already do so today.

#### COMMUNITY MEETING 1

- **Foster City residents love** the city's picturesque landscape, proximity to the water, vibrant and inclusive community, sustainability initiatives, opportunities for outdoor play and recreation, sense of safety, and community diversity.

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- Participants noted that some **sustainability challenges facing Foster City** include cost barriers to households regarding sustainable living (e.g., purchasing electric vehicles (EVs) and solar panels), ensuring equity in initiatives, limited safe bike and pedestrian paths, aging infrastructure, and inadequate public outreach and education on sustainability topics and actions.
- **In the future**, participants want to see more accessible and safer bike and pedestrian routes and public transportation; waste reduction; support and financial incentives for EVs, solar panels, and other sustainability initiatives; water conservation and reclamation; a ban on plastics; and green buildings.

## PHASE 2: Setting Targets & Planning

### SURVEY 2

- Respondents felt that **subsidies** were needed in order to help homeowners, multifamily housing, and businesses upgrade their **existing infrastructure**.
- Respondents **want updated building codes**, requiring solar panels and other sustainability metrics.
- Respondents are worried about **overdevelopment**, and want to ensure that green space is preserved, while adopting more drought resistant plants.
- Residents were very interested in creating more **bike infrastructure** and **public transportation options** for residents of Foster City.
- There was an acknowledgement of the **difficulty of upgrading and adopting technology** while owning within a homeowners association.
- Some respondents suggested **taxing bad behaviors**, such as creating too much waste, recycling improperly or using too much electricity.
- Respondents hoped to **increase educational awareness** around climate change, recycling, and waste reduction.
- Make certain **data available** about waste rates, electricity use, and water use to encourage more civic responsibility among residents.

### COMMUNITY MEETING 2

- **The most pressing concerns** for Foster for workshop attendees were ecosystem health, public health, and conservation, placing emphasis on natural systems, community and community health.
- **Foster City residents** appreciate community action, civic responsibility and individual action, but also feel that **larger companies** should play a bigger role in creating climate solutions.
- **Building codes** need to encourage innovation, while also providing **incentives** to ensure that businesses and residents are motivated to take action and **make it easy** to install solar panels, electric appliances, and other energy-efficient upgrades and retrofits that reduce emissions.
- Workshop attendees want to see a **more walkable, less car dependent** Foster City, that encourages safe streets and pedestrian and biking pathways.

## PHASE 3: Plan Refinement & Implementation

### FOCUS GROUPS & COMMUNITY CONVERSATIONS

#### Top actions Foster City community members are already taking:

- Recycling & composting
- Taking public transportation or walking
- Electric vehicles
- Water and energy conservation
- Limiting single use plastic
- Extending the life of clothing

#### Anticipated challenges:

- Cost
- Time constraints & convenience
- Individual behavior change & impact
- Apathy & attitudes
- Accessibility
- Corporate polluters & political challenges



## Foster City 2024 Climate Action Plan Update

### **New ideas:**

- Micro-mobility options (i.e. scooter and bike-share)
- Electrification: grid, buses, vehicles
- Financial incentives and disincentives
- Fix-it Fairs

### **Foster City community members like to know more about:**

- What is Foster City doing?
- How to electric vehicles help?
- What can I do?
- Greenhouse gasses
- Alternative energy sources

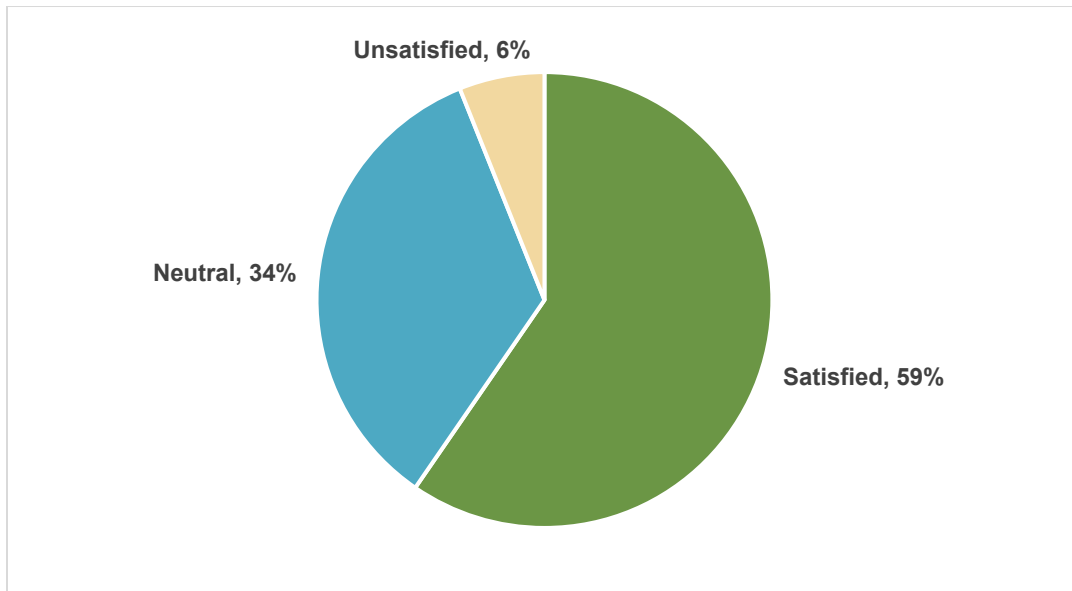
### **Community members would also like to see:**

- Community building & collaborations
- City engagement
- Shade from solar panels
- Educational & communications campaigns

## Next Steps

In survey 1, our first community touchpoint, we learned that 59% of respondents were satisfied with Foster City's environmental efforts to date.

**Figure 3. Satisfaction with Foster City's Environmental Efforts**



Respondents also shared in survey 1 what are the top sustainability changes they'd like to see, top sustainability actions they take today, and top actions they'd consider taking in the future.

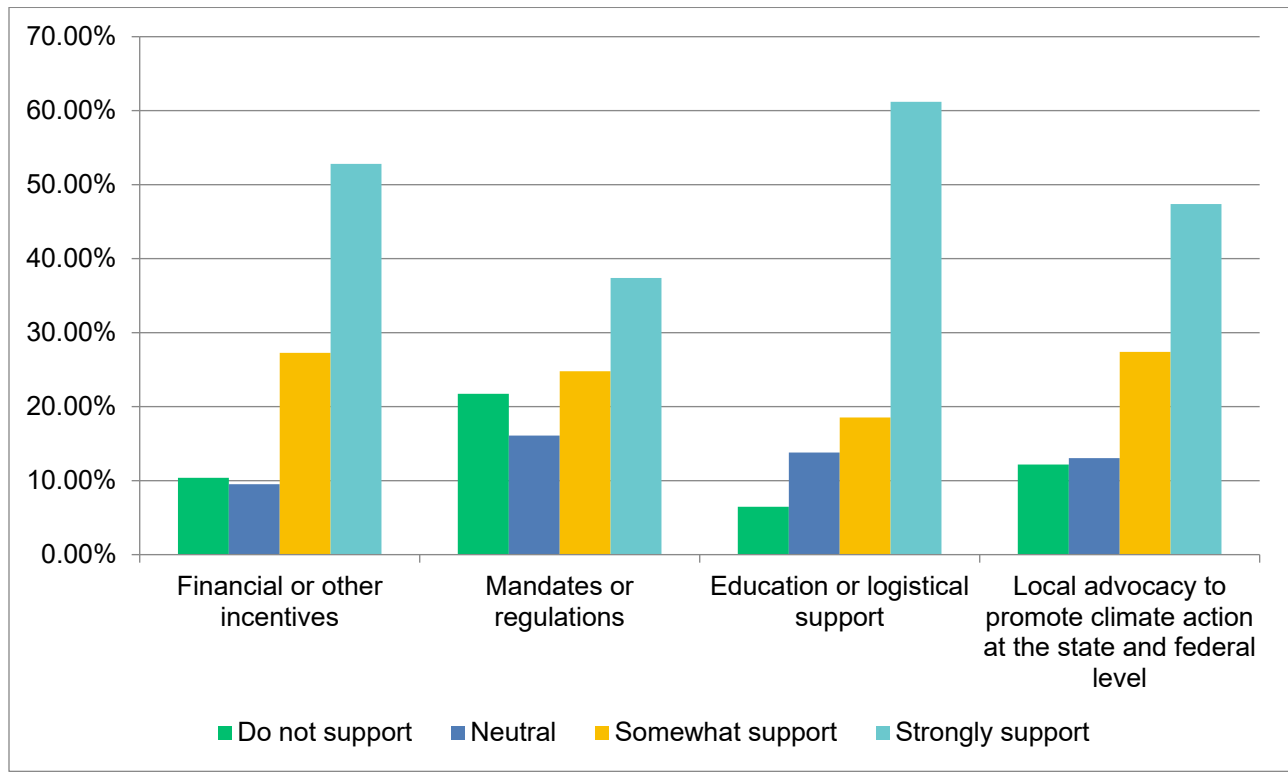
**Figure 4. Survey 1 Top Sustainable Behaviors and Priorities**



Through survey 2, we gained a better understanding of how Foster City community members would like their top sustainability priorities implemented through different type of action mechanisms through the CAP. This feedback was critical during action development to know what types of actions community would most support and be more likely to participate in, as well as provides great insight for what community would support for future policy decisions for the City.

## Foster City 2024 Climate Action Plan Update

**Figure 5. Level of Support for Types of Climate Action**



We also learned in survey 2 and workshop 2 what are top barriers for Foster City community members to take climate action. Participants shared that their top barriers included:

- **Cost or Resources (51.4%)** - there are other competing economic demands in my life that are more important to me and my family
- **Outside forces (27.4%)** - I feel that the changes need to be at larger scale than what I can do as an individual- nothing I do will make any difference
- **Time commitment (26.9%)** - I do not have enough time to think about climate change.

However, the lowest ranking barrier was level of care and interest (14.4%), which illustrates that most people are care and are excited to take climate action. We hope to leverage Foster City's excitement around climate action into implementation of the CAP.

In summary, the **Foster City Climate Action Plan (CAP)** development process, which began in September 2022, has been a testament to the power of community engagement in shaping effective environmental policy. The CAP team's comprehensive approach, involving a Community Engagement Plan, Citizens Sustainability Advisory Committee (CSAC) involvement, and a variety of engagement



## Foster City 2024 Climate Action Plan Update

activities, has successfully captured the diverse perspectives and priorities of the Foster City community. Through surveys, community meetings, and focus groups, the project team gained invaluable insights into residents' satisfaction with their quality of life, their environmental concerns, and their aspirations for a more sustainable and equitable city.



The feedback collected has been instrumental in identifying key areas of focus, such as the need for improved public transportation and sustainable living solutions. It has also underscored the community's enthusiasm for taking proactive climate action, ranging from everyday practices like recycling and composting to broader initiatives like advocating for updated building codes and green infrastructure.

The CAP development process has not only fostered a deeper understanding of community needs and aspirations but has also laid the groundwork for meaningful, actionable strategies. The engagement journey reflects Foster City's commitment to a collaborative, inclusive approach in tackling climate change challenges. As the CAP moves into its implementation phase, the solid foundation of community input will be crucial in ensuring its success and sustainability, truly embodying the spirit of collective action for a better future.



An aerial photograph of a city, likely Foster City, California, showing a dense residential and commercial area with winding roads and several large bodies of water. The image is overlaid with a semi-transparent blue filter. A thick, horizontal green bar spans across the middle of the page, positioned behind the main title.

**City of Foster City Climate Action Plan**

# **Appendix D**

**2019 Greenhouse Gas Emissions Inventory**



# 2019 Foster City GHG Emissions Inventory

**Table 1: Inventory Year Selection**

Most Recent GHG Inventory	2019
2020 Target Year	2020
2030 Target Year	2030
2040 Target Year	2040
2045 Target Year	2045
2050 Target Year	2050
Years from GHG Inventory --> 2020	1
Years from GHG Inventory --> 2030	11
Years from GHG Inventory --> 2040	21
Years from GHG Inventory --> 2045	26
Years from GHG Inventory --> 2050	31

**Table 2: 2005 Community Greenhouse Gas Inventory**

Sector	Source	GHG Emissions (MT CO <sub>2</sub> e)	Percent of Total GHG Emissions
Residential	Electricity	16,407	6%
	Natural Gas	28,335	11%
Commercial/Industrial	Electricity	26,164	10%
	Natural Gas	16,741	6%
Direct Access	Electricity	10,676	4%
Transportation	Local Roads-Gasoline	56,890	21%
	Local Roads-Diesel		
	State Highways-Gasoline	94,976	36%
	State Highways-Diesel		
	Off-Road Equipment (Residential)	11,435	4%
Caltrain	0	0%	
Generated Waste	All Waste Types	4,144	2%
Waste – Landfill Cover	Plant Debris	9	0.00%
Wastewater	Wastewater treatment	0	0.0%
<b>TOTAL</b>		<b>265,777</b>	<b>100.0%</b>

**Table 3: 2010 Community Greenhouse Gas Inventory**

Sector	Source	GHG Emissions (MT CO <sub>2</sub> e)	Percent of Total GHG Emissions
Residential	Electricity	14,489	6%
	Natural Gas	28,579	12%
Commercial/Industrial	Electricity	28,192	11%
	Natural Gas	19,089	8%
Direct Access	Electricity	6,216	3%
Stationary Sources	Various Fuels	52	0%
	Local Roads-Gasoline	48,582	20%
	Local Roads-Diesel	4,256	2%



Transportation	State Highways-Gasoline	75,202	31%
	State Highways-Diesel	6,588	3%
	Off-Road Equipment (Residential)	11,926	5%
	Caltrain		0%
	Freight Trains		0%
Generated Waste	All Waste Types	2,567	1%
Waste – Landfill Cover	Plant Debris	67	0%
Wastewater	Wastewater treatment	170	0%
Water	Embedded Electricity in Water	568	0%
<b>TOTAL</b>		<b>246,542</b>	<b>100.0%</b>

**Table 4: 2019 Community Greenhouse Gas Inventory**

Sector	Source	GHG Emissions (MT CO <sub>2</sub> e)	Percent of Total GHG Emissions
Residential	Electricity	4,075	2%
	Natural Gas	24,940	12%
Commercial/Industrial	Electricity	4,735	2%
	Natural Gas	25,420	12%
Direct Access	Electricity	5,747	3%
Stationary Sources	Various Fuels	20,738	10%
Transportation	Local Roads-Gasoline	19,604	10%
	Local Roads-Diesel	2,817	1%
	State Highways-Gasoline	68,591	33%
	State Highways-Diesel	9,855	5%
	Off-Road Equipment (Residential)	16,657	8%
	Caltrain	0	0%
	Freight Trains	0	0%
Generated Waste	All Waste Types	2,234	1%
Waste – Landfill Cover	Plant Debris	0	0%
Wastewater	Wastewater treatment	536	0%
Water	Embedded Electricity in Water	8	0%
<b>TOTAL</b>		<b>205,957</b>	<b>100%</b>
<b>2019 Annual VMT:</b>			<b>266,983,292</b>
<b>2014 Disposed Waste Emissions (MT CO<sub>2</sub>e):</b>			<b>1,944</b>

**Table 5: 2011-2016 Community GHG Inventories**

2011 GHG Inventory Total Emissions (MT CO <sub>2</sub> e)	252,065	2015 GHG Inventory Total Emissions (MT CO <sub>2</sub> e)	232,913
2012 GHG Inventory Total Emissions (MT CO <sub>2</sub> e)	236,865	2016 GHG Inventory Total Emissions (MT CO <sub>2</sub> e)	193,537
2013 GHG Inventory Total Emissions (MT CO <sub>2</sub> e)	238,698	2017 GHG Inventory Total Emissions (MT CO <sub>2</sub> e)	192,660
2014 GHG Inventory Total Emissions (MT CO <sub>2</sub> e)	225,057	2018 GHG Inventory Total Emissions (MT CO <sub>2</sub> e)	199,309



An aerial photograph of a city, likely Foster City, California, showing a dense residential and commercial area with winding roads and several large bodies of water. The image is overlaid with a semi-transparent blue filter. A thick, horizontal green bar spans across the middle of the page, positioned behind the main title.

**City of Foster City Climate Action Plan**

# **Appendix E**

**CAP Implementation Plan**



## ENERGY & WATER GOALS

E-W.1 Reduce emissions from the energy sector

E-W.2 Decarbonize residential and commercial buildings

E-W.3 Reduce water consumption

Short-term: by end of year 1 Low: \$0 – \$10,000  
 Mid-term: by end of end of year 3 Moderate: \$10,000 – \$100,000  
 Long-term: by end of year 5 High: \$100,000 – \$1,000,000

Action ID	Action Name	Strategy ID	Strategy	Timeline	Cost	Funding Source	GHG Impact	Success Criteria & KPI's
E-W.1.1.1	Market participation in commercial energy efficiency programs offered by SMC Energy Watch and PG&E.	E-W.1.1	Promote and expand participation in residential and commercial energy efficiency programs.	Short-term	Low	Sustainable Foster City Budget	Low	# of participants (will need data from partners); # of clicks from online marketing
E-W.1.1.2	Promote appliance rebate programs offered by Peninsula Clean Energy (PCE), PG&E, and the Bay Area Air Quality Management District (BAAQMD).	E-W.1.1	Promote and expand participation in residential and commercial energy efficiency programs.	Short-term	Low	Sustainable Foster City Budget	Low	Number of participants (will need data from partners); Number of clicks from online marketing
E-W.1.1.3	Continue and expand participation in energy efficiency programs as they become available.	E-W.1.1	Promote and expand participation in residential and commercial energy efficiency programs.	Short-term	Low	Sustainable Foster City Budget	Low	Number of participants (will need data from partners); Number of clicks from online marketing
E-W.1.1.4	Promote utility, state, and federal rebate and incentive programs.	E-W.1.1	Promote and expand participation in residential and commercial energy efficiency programs.	Short-term	Low	Sustainable Foster City Budget	Low	Number of participants (will need data from partners); Number of clicks from online marketing
E-W.1.1.5	Participate and promote financing and loan programs for residential and non-residential projects such as Property Assessed Clean Energy (PACE) programs, PG&E on-bill repayment, and California Hub for Energy Efficiency Financing (CHEEF) programs.	E-W.1.1	Promote and expand participation in residential and commercial energy efficiency programs.	Mid-term	Low	Sustainable Foster City Budget	Low	Number of participants (will need data from partners); Number of clicks from online marketing
E-W.1.1.6	Through outreach and education, provide guidance to renters on how to obtain energy usage and efficiency information for rental units	E-W.1.1	Promote and expand participation in residential and commercial energy efficiency programs.	Short-term	Low	Sustainable Foster City Budget	Low	Number of community members assisted
E-W.1.1.7	Promote energy audits for all residential, commercial, and municipal buildings through education and outreach.	E-W.1.1	Promote and expand participation in residential and commercial energy efficiency programs.	Short-term	Low	Sustainable Foster City Budget	Low	Number of participants (will need data from partners)
E-W.1.2.1	Periodically conduct energy efficiency audits at City buildings and facilities and implement recommended energy efficiency projects.	E-W.1.2	Reduce municipal energy consumption through energy efficiency projects and behavioral and operational changes.	Mid-term	Low-Moderate	CITY funding sources unless other sources identified in future	Low	Number of buildings audited; Number of buildings improved; Net reduction in energy use by City facilities
E-W.2.1.1	Provide financial incentives for solar PV and battery storage installations.	E-W.2.1	Increase residential and commercial solar installations.	Short-term	Moderate	Currently utilizing funding set aside from Rule 20A credit sale; when this funding runs out, then CITY funding sources unless other sources identified in future.	Medium	Number of rebates provided
E-W.2.1.2	Encourage bulk purchases such as the Peninsula SunShares Program.	E-W.2.1	Increase residential and commercial solar installations.	Short-term	Low	Sustainable Foster City Budget	Low	Number of participants (will need data from partners)
E-W.2.1.3	Provide free assistance for project developers through the Power Purchase Agreements (PPA) and interconnection process.	E-W.2.1	Increase residential and commercial solar installations	Long-term	Low	Sustainable Foster City Budget	Low	Number of developers assisted
E-W.2.1.4	Update building codes, design guidelines, and zoning ordinances, as necessary, to further facilitate small, medium, and large-scale installations, where appropriate.	E-W.2.1	Increase residential and commercial solar installations.	Mid-term	Low	Sustainable Foster City Budget	Low	None identified
E-W.2.1.5	Encourage installation of solar panels over parking areas on commercial projects and large-scale residential developments through ordinances, engagement campaigns, or agency incentives.	E-W.2.1	Increase residential and commercial solar installations.	Mid-term	Low	Sustainable Foster City Budget	Low	Number of solar arrays installed
E-W.2.1.6	Identify and promote financing and loan programs for residential and non-residential projects.	E-W.2.1	Increase residential and commercial solar installations.	Mid-term	Low	Sustainable Foster City Budget	Low	Number of participants (will need data from partners)



Action ID	Action Name	Strategy ID	Strategy	Timeline	Cost	Funding Source	GHG Impact	Success Criteria & KPI's
E-W.2.1.7	Study opportunities and specific action steps for expansion of municipal rooftop solar and battery storage.	E-W.2.1	Increase residential and commercial solar installations.	Mid-term	Moderate-High	CITY funding sources unless other sources identified in future		Completion of updated solar feasibility study including recommendations for specific buildings
E-W.2.1.8	Provide education and outreach to stakeholders, including businesses, residents, and contractors, on the benefits of pairing battery storage with solar PV systems at City information centers like the permit counters.	E-W.2.1	Increase residential and commercial solar installations.	Mid-term	Low	Sustainable Foster City Budget	Low	Number of community members assisted with information
E-W.2.2.1	Adopt amendments to the Foster City Building Code for Green Building, Energy, and Plumbing during the Foster City Building Code 2025 cycle including a two-way air conditioning ordinance	E-W.2.2	Decarbonize existing commercial and residential buildings to reduce natural gas consumption from existing commercial buildings by 19% and natural gas consumption from existing residential buildings by 25% by 2030 or reduce greenhouse gas emissions by 10,792 MTCO2e in existing commercial and residential buildings by 2030	Mid-term	Low	Sustainable Foster City Budget	High	Number of gas appliance replacements
E-W.2.2.2	Develop and implement a community-wide education and outreach campaign to provide information, incentives, benefits, and technical support for building electrification to increase voluntary adoption of all-electric technologies.	E-W.2.2	Decarbonize existing commercial and residential buildings to reduce natural gas consumption from existing commercial buildings by 19% and natural gas consumption from existing residential buildings by 25% by 2030 or reduce greenhouse gas emissions by 10,792 MTCO2e in existing commercial and residential buildings by 2031	Short-term	Low	Sustainable Foster City Budget	Medium	Number of community members assisted with information; Number of gas appliance replacements
E-W.2.2.3	Work with clean energy providers like PCE and local installers to provide technical support to residents and businesses needing to replace gas appliances upon burnout.	E-W.2.2	Decarbonize existing commercial and residential buildings to reduce natural gas consumption from existing commercial buildings by 19% and natural gas consumption from existing residential buildings by 25% by 2030 or reduce greenhouse gas emissions by 10,792 MTCO2e in existing commercial and residential buildings by 2032	Mid-term	Low	Sustainable Foster City Budget	Medium	Number of gas appliance replacements
E-W.2.2.4	Advocate for and require that financial incentive programs for electrification address fixed-income households (senior and non-senior), multi-family apartments, and restricted affordable residential units.	E-W.2.2	Decarbonize existing commercial and residential buildings to reduce natural gas consumption from existing commercial buildings by 19% and natural gas consumption from existing residential buildings by 25% by 2030 or reduce greenhouse gas emissions by 10,792 MTCO2e in existing commercial and residential buildings by 2033	Short-term	Low	Sustainable Foster City Budget	Medium	Ammendments enacted
E-W.2.2.5	Promote awareness and understanding of electrification options to the construction industry and the community through education and outreach and community partners.	E-W.2.2	Decarbonize existing commercial and residential buildings to reduce natural gas consumption from existing commercial buildings by 19% and natural gas consumption from existing residential buildings by 25% by 2030 or reduce greenhouse gas emissions by 10,792 MTCO2e in existing commercial and residential buildings by 2034	Mid-term	Low	Sustainable Foster City Budget	Low	Number of outreach efforts, Number of businesses reached
E-W.2.2.6	Work with the County and regional partners, as appropriate, to create and/or implement a Home Ambassador electrification program and promote the program to the community.	E-W.2.2	Decarbonize existing commercial and residential buildings to reduce natural gas consumption from existing commercial buildings by 19% and natural gas consumption from existing residential buildings by 25% by 2030 or reduce greenhouse gas emissions by 10,792 MTCO2e in existing commercial and residential buildings by 2035	Mid-term	Low-Moderate	Sustainable Foster City Budget;	Low	Number of home ambassadors; Number of electrification events
E-W.2.2.7	Incentivize electric panel upgrades in existing residential and office buildings to accommodate all-electric technologies.	E-W.2.2	Decarbonize existing commercial and residential buildings to reduce natural gas consumption from existing commercial buildings by 19% and natural gas consumption from existing residential buildings by 25% by 2030 or reduce greenhouse gas emissions by 10,792 MTCO2e in existing commercial and residential buildings by 2036	Mid-term	Low-Moderate	Sustainable Foster City Budget;	Medium	Number of panels upgraded grants
E-W.2.3.1	Until PCE's ECOplus becomes 100% renewable (estimated by 2025), promote and expand the community's participation in Peninsula Clean Energy's ECO100 product.	E-W.2.3	Support Peninsula Clean Energy in providing 100% carbon-neutral electricity by 2030 and maintain Peninsula Clean Energy opt-out rate of less than 2% for residential customers and 3% for commercial customers by 2030	Short-term	Low	Sustainable Foster City Budget	High	Number of opt-outs; Number of outreach efforts
E-W.2.3.2	Collaborate with PCE and community-based organizations to conduct educational outreach to maintain the reduced opt-out rate levels in the community	E-W.2.3	Support Peninsula Clean Energy in providing 100% carbon-neutral electricity by 2030 and maintain Peninsula Clean Energy opt-out rate of less than 2% for residential customers and 3% for commercial customers by 2030	Short-term	Low	Sustainable Foster City Budget	Low	Number of opt-outs; Numer of outreach efforts
E-W.2.4.1	Adopt a single margin source energy score that exceeds state minimums for all applicable building types during the Foster City Building Code 2025 cycle	E-W.2.4	Adopt a single margin source energy score for new residential and commercial construction that exceeds the State's minimum standards by 2026	Mid-Term	Low	General Fund	High	Reach Codes adopted
E-W.3.1.1	Continue to promote water conservation programs and incentives.	E-W.3.1	Reduce water consumption by 5% by 2030 and 15% by 2045	Short-term	High	Rebates: Tier 2 Conservation Rates Water Neutrality: Developers Ordinances: CITY funding sources	Low	Number of rebates provided; Number of developments achieving neutrality

## TRANSPORTATION & LAND USE GOALS

T-L.1 Reduce vehicle miles traveled in the City

T-L.2 Decarbonize transportation

T-L.3 Increase walkability and bike ability

Short-term: by end of year 1 Low: \$0 – \$10,000  
 Mid-term: by end of end of year 3 Moderate: \$10,000 – \$100,000  
 Long-term: by end of year 5 High: \$100,000 – \$1,000,000

Action ID	Action Name	Strategy ID	Strategy	Timeline	Cost	Funding Source	GHG Impact	Success Criteria & KPI's
T-L.1.1.1	Work with Commute.org and SamTrans to maximize ridership by making transit more frequent, accessible, cost-beneficial, and convenient through the expansion and/or improvement of transit routes, schedules, and bus shelters.	T-L.1.1	Reduce vehicle miles traveled commuting to work.	Short-term	Low	Sustainable Foster City Budget	Low	Transit Ridership
T-L.1.1.2	Work with small business owners to provide “first and last mile” programs to maximize utilization of public transit.	T-L.1.1	Reduce vehicle miles traveled commuting to work.	Mid-term	Low	Sustainable Foster City Budget	Low	Transit Ridership
T-L.1.1.3	Continue collaborating with transit and transportation operators to develop shorter route shuttle programs serving residents, similar to Commute.org’s shuttle program.	T-L.1.1	Reduce vehicle miles traveled commuting to work.	Short-term	Low	Sustainable Foster City Budget	Low	Transit Ridership
T-L.1.1.4	Continue working with Commute.org, Metropolitan Transportation Commission (MTC), and the Bay Area Air Quality Management District (BAAQMD) to promote transportation demand programs to local employers, including rideshare matching programs, vanpool incentive programs, emergency ride home programs, telecommuting, transit use discounts and subsidies, showers and changing facilities, bicycle racks and lockers, and other incentives to use transportation other than single occupant vehicles.	T-L.1.1	Reduce vehicle miles traveled commuting to work.	Short-term	Low	Sustainable Foster City Budget	Low	Transit Ridership
T-L.1.1.5	Work with MTC to identify and notify non-compliant businesses in Foster City and encourage their participation in providing transportation demand management programs.	T-L.1.1	Reduce vehicle miles traveled commuting to work.	Mid-term	Low	Sustainable Foster City Budget	Low	Transit Ridership
T-L.1.1.6	Continue to require program support through City Development Agreements and Conditions of Approval	T-L.1.1	Reduce vehicle miles traveled commuting to work.	Short-term	Low	Sustainable Foster City Budget	Low	Number of Development Agreements
T-L.2.1.1	Increase community knowledge of rebates and incentives for ZEV adoption.	T-L.2.1	Increase passenger ZEV adoption to 31% and commercial ZEV adoption to 25% by 2030.	Short-term	Low	CITY funding sources unless other sources identified in	Low	Existence of perpetually functioning web link
T-L.2.1.2	As the state provides information, document the number of new-vehicle registrations for passenger vehicles that are for zero-emission vehicles (ZEVs), including plug-in electric vehicles (EVs) and hydrogen fuel cell electric vehicles, as a means of evaluating outreach effectiveness and in preparation of the State of California’s restriction on the sale of gas-powered automobiles by 2035.	T-L.2.1	Increase passenger ZEV adoption to 31% and commercial ZEV adoption to 25% by 2030.	Short-term	Low	Sustainable Foster City Budget	Low	Information obtained from the State
T-L.2.1.3	Institute and/or promote financial incentives that encourage building EV chargers and discourage using vehicles with internal combustion engines.	T-L.2.1	Increase passenger ZEV adoption to 31% and commercial ZEV adoption to 25% by 2030.	Mid-Term	Moderate	Sustainable Foster City Budget	Med	Number of incentives used; Number of outreach events/residents
T-L.2.1.4	Pursue opportunities to expand the City’s EV charging network by identifying suitable Level 2 and Level 3 DC fast charging locations both in public and private locations.	T-L.2.1	Increase passenger ZEV adoption to 31% and commercial ZEV adoption to 25% by 2030.	Short-term	Low	CITY funding sources unless other sources identified in future	Low	Completed EV fleet conversion plan
T-L.2.1.5	Facilitate public private partnerships and streamlining permits to install 313 publicly accessible EV chargers in Foster City by 2030	T-L.2.1	Increase passenger ZEV adoption to 31% and commercial ZEV adoption to 25% by 2030.	Short-term	Low	Sustainable Foster City Budget	Med	Number of EV charging stations installed
T-L.2.1.6	Participate in regional and coordinated local procurement efforts, outreach activities, and planning initiatives	T-L.2.1	Increase passenger ZEV adoption to 31% and commercial ZEV adoption to 25% by 2030.	Short-term	Low	CITY funding sources unless other sources identified in future	Low	Number of outreach events/people, Number of participants
T-L.2.2.1	Use code enforcement to help support CARB’s Small Offroad Engine (SORE) ban on fossil fuel equipment use.	T-L.2.2	Decarbonize 18% of gas-powered equipment by 2030	Short-term	Low	CITY funding sources unless other sources identified in future	Low	Number of code enforcement complaints and resolutions
T-L.2.2.2	Develop an off-road incentive and technical assistance program for SORE users transitioning to ZEV	T-L.2.2	Decarbonize 18% of gas-powered equipment by 2030	Mid-term	Moderate	CITY funding sources unless other sources identified in future	Med	Number of outreach events/people, Number of incentives used

Action ID	Action Name	Strategy ID	Strategy	Timeline	Cost	Funding Source	GHG Impact	Success Criteria & KPI's
T-L.3.1.1	Adopt a mobility priority policy with the General Plan as follows: 1) walk (persons with disabilities, pedestrians); 2) micro-mobility (including bicycles); 3) transit and shuttle; 4) drop-off and pick-up (ride share and taxi); and 5) auto (motorcycle, carpool/vanpool, carshare, and SOV).	T-L.3.1	Increase the community's active transportation mode share to 4% by 2030	Mid-term	Low	Fund 128 - General Plan Update Fund and Grant Funding	Low	Existance of Bike/Ped Plan that can inform Mobility Priority Policy
T-L.3.1.2	Promote safe bicycling and micromobility through outreach channels and partner agencies, including e-bikes, electric scooters, and electric skateboards.	T-L.3.1	Increase the community's active transportation mode share to 4% by 2030	Short-term	Low	Can be accomplished through normal PD workflow	Low	Percentage of residents using alternative transportation to get to school, Number/trend of accidents using alternative transportation methods
T-L.3.1.3	Continue regional collaboration efforts to establish a bike and/or scooter share program.	T-L.3.1	Increase the community's active transportation mode share to 4% by 2030	Mid-term	Moderate	Sustainable Foster City Budget	Low	None identified
T-L.3.1.4	Enhance City policies to promote shared electric bikes and scooters	T-L.3.1	Increase the community's active transportation mode share to 4% by 2030	Mid-term	Low	Sustainable Foster City Budget; GP Maint	Low	None identified
T-L.3.1.5	Pilot a program to provide free or reduced-price access to e-bikes or other micro-mobility options to low-income residents and students.	T-L.3.1	Increase the community's active transportation mode share to 4% by 2030	Mid-term	Moderate	Sustainable Foster City Budget	Low	Number of users
T-L.3.1.6	Continue supporting the Safe Routes to School Program and strive to increase bicycling, walking, carpooling, and public transit to school.	T-L.3.1	Increase the community's active transportation mode share to 4% by 2030	Short-term	Low	Streets-related funding is likely to be available for these type of improvements (Measures A/M/W, SB1, Gas Tax)	Low	Percentage of students using alternative transportation to get to school, Number/trend of accidents involving students using alternative transportation methods
T-L.3.1.7	Improve curb management to prioritize rideshare parking/loading zones, scooter and bike share docks, bike parking, EV charging stations, and autonomous vehicle loading zones.	T-L.3.1	Increase the community's active transportation mode share to 4% by 2030	Short-term	Moderate	Some curb and gutter work may qualify for Streets funding, but otherwise CITY funding sources unless other sources identified in future	Low	Number of curb improvements by category



## WASTE & CONSUMPTION

### W-C.1 Increase diversion of materials from landfills

Short-term: by end of year 1 Low: \$0 – \$10,000  
 Mid-term: by end of end of year 3 Moderate: \$10,000 – \$100,000  
 Long-term: by end of year 5 High: \$100,000 – \$1,000,000

Action ID	Action Name	Strategy ID	Strategy	Timeline	Cost	Funding Source	GHG Impact	Success Criteria & KPI's
W-C.1.1.1	Achieve an increased waste diversion rate through a combination of efforts, including promoting traditional recycling and organics recycling programs and local enforcement of recycling requirements.	W-C.1.1	Significantly reduce organic waste to landfills	Mid-term	Moderate	Solid Waste Rates	Low	Waste diversion rate
W-C.1.1.2	Require regular residential and commercial waste audits and waste characterization studies to identify opportunities for increased diversion and to track progress in meeting targets.	W-C.1.1	Significantly reduce organic waste to landfills	Mid-term	Moderate	Solid Waste Rates	Low	Number of Audits and Waste Characterization Studies
W-C.1.1.3	Encourage and facilitate commercial and multifamily property owners to require responsible use of on-site recycling facilities in lease and rental agreements and to train and regularly evaluate janitorial, landscape, and other property management services.	W-C.1.1	Significantly reduce organic waste to landfills	Mid-term	Low	Solid Waste Rates	Low	Waste diversion rate for MFD and Comm sectors; Percentage of properties including waste clauses in contracts
W-C.1.1.4	Promote reuse, repair, and recycling of inorganic materials, and encourage reduced use of packaging and single-use items through engagement campaigns.	W-C.1.1	Significantly reduce organic waste to landfills	Short-term	Low	CITY funding sources unless other sources identified in future	Low	Number of events promoted; Number of events hosted; Number of FC residents participating in events; Number of outreach campaigns
W-C.1.1.5	Consider City policy to encourage and provide resources for all City Events (those sponsored by or using City facilities) to be low to zero-waste events.	W-C.1.1	Significantly reduce organic waste to landfills	Short-term	Low	FUND 129 Construction and Demolition Deposit Forfeitures, donations	Low	Existence of Event Policy; Waste diversion rate, # of zero-waste of events; Amount of waste diverted per event/quarter
W-C.1.1.6	Embark on an educational and social marketing-based campaign to increase recycling, composting, reuse, and waste reduction at public facilities.	W-C.1.1	Significantly reduce organic waste to landfills	Short-term	Low	Solid Waste Rates	Low	Number and reach of outreach campaigns
W-C.1.2.1	Align with SB 1383 requirements to procure and apply 1,581 tons of compost annually by 2030.	W-C.1.2	Annually procure and apply 1,581 tons of compost by 2030	Short-term	Low	Solid Waste Rates	Low	Amount of compost procured
W-C.1.2.2	Collaborate with San Mateo County to identify locations within the county to apply compost if locations within the City cannot be identified.	W-C.1.2	Annually procure and apply 1,581 tons of compost by 2030	Short-term	Low	CITY funding sources unless other sources identified in future	Low	Amount of Compost divereted

## CLIMATE RESILIENCY & LEADERSHIP

C-L.1 Educate and support the whole community to live sustainability

C-L.2 Prepare for and adapt to a rising sea level and climate change

Short-term: by end of year 1 Low: \$0 – \$10,000  
 Mid-term: by end of end of year 3 Moderate: \$10,000 – \$100,000  
 Long-term: by end of year 5 High: \$100,000 – \$1,000,000

Action ID	Action Short Name	Strategy ID	Strategy (& Anticipated GHG Reduction)	Timeline	Cost	Funding Source	GHG Impact	Success Criteria & KPI's
C-L.1.1.1	Encourage all new municipal buildings and facilities to meet a minimum LEED silver standards as outlined by the US Green Building Council or equivalent green building rating system. Encourage feasibility studies for zero net energy use, on-site renewable energy generation, and on-site batteries for municipal buildings and facilities.	C-L.1.1	Collaborate with community stakeholders to create Local Climate Action Programs that empower individuals to make behavioral changes	Short-term	Moderate	General Fund, grants	Mod	GHG reduction from BAU design
C-L.1.1.2	Track and report progress towards achieving the City's greenhouse gas reduction goal - updating a Climate Action Dashboard for Community use.	C-L.1.1	Collaborate with community stakeholders to create Local Climate Action Programs that empower individuals to make behavioral changes	Mid-Term	Low	Sustainable Foster City Budget	Low	None identified
C-L.1.1.3	Regularly benchmark the environmental performance of municipal buildings, landscaping, parks and facilities, including energy and water use.	C-L.1.1	Collaborate with community stakeholders to create Local Climate Action Programs that empower individuals to make behavioral changes	Short-term	Low	Sustainable Foster City Budget	Low	None identified
C-L.1.1.4	Prepare an inventory of emissions from municipal operations every five years, establish a GHG reduction target, and develop a work plan to reduce municipal emissions to achieve carbon neutrality by 2045.	C-L.1.1	Collaborate with community stakeholders to create Local Climate Action Programs that empower individuals to make behavioral changes	Long-term	Moderate	Sustainable Foster City Budget	Low	new GHG inventory
C-L.1.1.5	Seek funding opportunities to support implementation of greenhouse gas reduction projects, exploring grant funding, rebates, and other incentive opportunities.	C-L.1.1	Collaborate with community stakeholders to create Local Climate Action Programs that empower individuals to make behavioral changes	Short-term	Low	Sustainable Foster City Budget	Low	Number of grants applied for and received
C-L.1.1.6	Create robust education and marketing Climate Action Programs to support the Community's sustainability goals.	C-L.1.1	Collaborate with community stakeholders to create Local Climate Action Programs that empower individuals to make behavioral changes	Short-term	Low	Sustainable Foster City Budget	Low	Number of community members reached
C-L.2.1.1	Coordinate and integrate climate adaptation planning consistently throughout related City plans, including but not limited to the General Plan and its Safety Element, Local Hazard Mitigation Plan (LHMP), sea level rise adaptation plans, and emergency and capital improvement plans.	C-L.2.1	Develop adaptation strategies to assist the Foster City community to the effects of climate change.	Mid-Term	Low	Sustainable Foster City Budget	Low	None identified
C-L.2.1.2	Ensure fair and robust inclusion of lower-income households and diverse communities in the planning and response to climate change impacts, including sea level rise, wildfire, public health, and emergency preparedness.	C-L.2.1	Develop adaptation strategies to assist the Foster City community to the effects of climate change.	Short-term	Low	Sustainable Foster City Budget	Low	Number of low-income community members reached
C-L.2.1.3	Seek opportunities to increase the City's tree canopy to combat extreme heat	C-L.2.1	Develop adaptation strategies to assist the Foster City community to the effects of climate change.	Long-term	Low to Moderate	Genral Fund	Low	Number of new trees planted



An aerial photograph of a city, likely Foster City, California, showing a dense residential and commercial area with a prominent winding river or canal system. The image is overlaid with a semi-transparent blue filter. A thick, horizontal green bar is positioned below the main title.

City of Foster City Climate Action Plan

# Appendix F

Development Checklist



# Appendix F: Development Checklist

The **Bay Area Air Quality Management District (BAAQMD)** has analyzed the requirements for new land-use development projects to support California’s long-term climate goal of reaching carbon neutrality by 2045. Based on this analysis, the Air District has determined that a new land use development project initiated today must incorporate specific design elements to contribute its “fair share” toward achieving carbon neutrality by 2045. The full document “Air Quality Guidelines Appendix B: CEQA Thresholds for Evaluating the Significance of Climate Impacts From Land Use Projects and Plans” can be found here: <https://tinyurl.com/yzp5dhw2>.

## Thresholds for Land Use Projects (Must Include A or B)

- A. Projects must include, at a minimum, the following project design elements:
  - 1. Buildings
    - a. The project will not include natural gas appliances or natural gas plumbing (in both residential and nonresidential development).
    - b. The project will not result in any wasteful, inefficient, or unnecessary energy usage as determined by the analysis required under CEQA Section 21100(b)(3) and Section 15126.2(b) of the State CEQA Guidelines.
  - 2. Transportation
    - a. Achieve a reduction in project-generated vehicle miles traveled (VMT) below the regional average consistent with the current version of the California Climate Change Scoping Plan (currently 15 percent) or meet a locally adopted Senate Bill 743 VMT target, reflecting the recommendations provided in the Governor’s Office of Planning and Research’s Technical Advisory on Evaluating Transportation Impacts in CEQA:
      - i. Residential projects: 15 percent below the existing VMT per capita
      - ii. Office projects: 15 percent below the existing VMT per employee
      - iii. Retail projects: no net increase in existing VMT
    - b. Achieve compliance with off-street electric vehicle requirements in the most recently adopted version of CALGreen Tier 2.
- B. Be consistent with a local GHG reduction strategy that meets the criteria under State CEQA Guidelines Section 15183.5(b).

## Thresholds for Plans (Must Include A or B)

- A. Meet the State’s goals to reduce emissions to 40 percent below 1990 levels by 2030 and carbon neutrality by 2045; or
- B. Be consistent with a local GHG reduction strategy that meets the criteria under State CEQA Guidelines Section 15183.5(b).