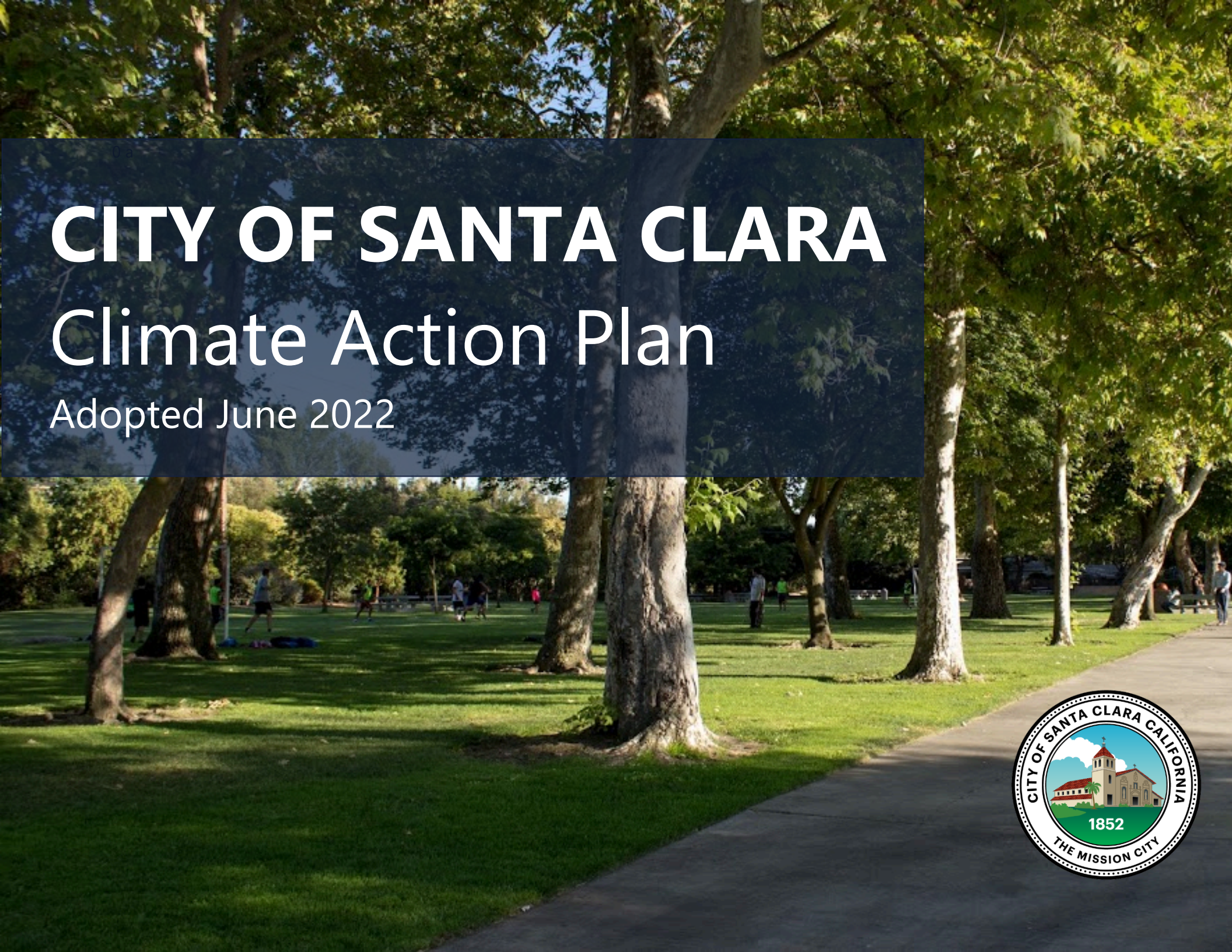

CITY OF SANTA CLARA

Climate Action Plan

Adopted June 2022

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ACRONYMS & ABBREVIATIONS

BAWSCA	Bay Area Water Supply & Conservation Agency
CAP	Climate Action Plan
C&D	Construction & Demolition
CARB	California Air Resources Board
CDD	Community Development District
CEQA	California Environmental Quality Act
CFL	Compact Fluorescent Lamps
EDR	Energy Design Rating
EV	Electric Vehicle
GHG	Greenhouse Gas
GSI	Green Stormwater Infrastructure
MWELO	Model Water Efficient Landscape Ordinance
RPS	Renewable Portfolio Standard
SFPUC	San Francisco Public Utilities Commission
SOV	Single-Occupancy Vehicle
SVP	Silicon Valley Power
TDM	Transportation Demand Management
TOD	Transit Oriented Development
VMT	Vehicle Miles Traveled
ZEV	Zero Emission Vehicles

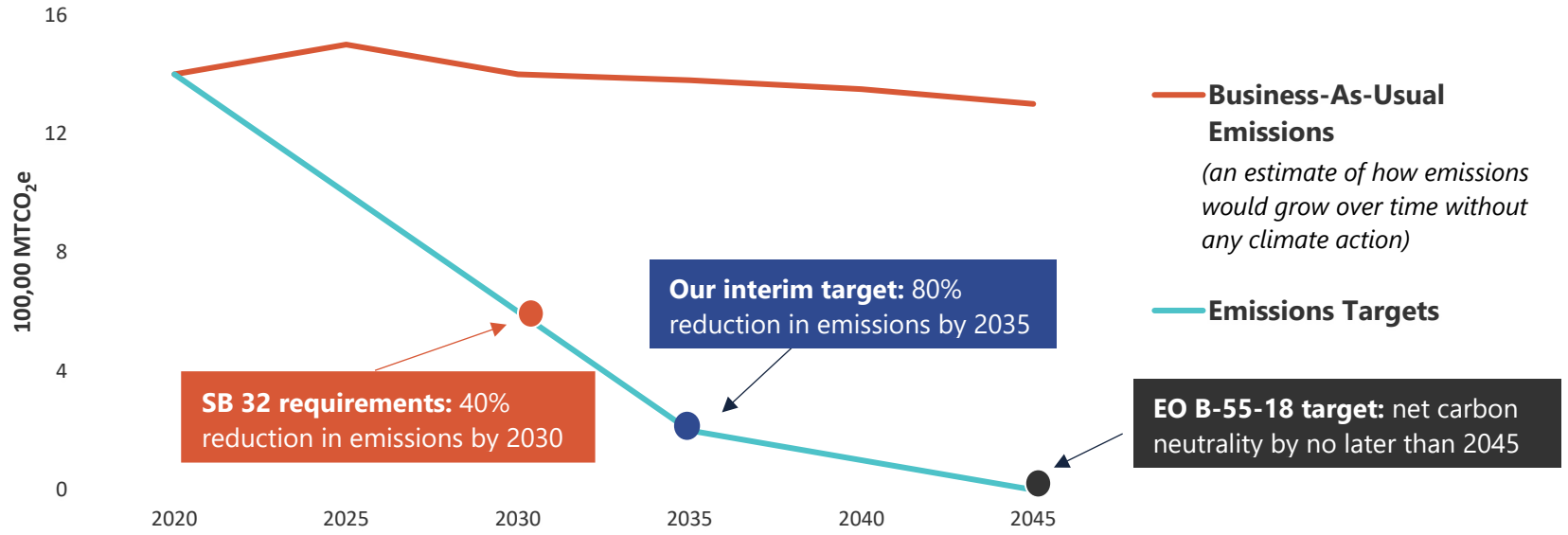
PLAN AT-A-GLANCE

OBJECTIVES

Santa Clara's updated Climate Action Plan (CAP) aims to take an equitable, inclusive, and pragmatic approach to holistically addressing climate change in a way that not only reduces greenhouse gas emissions and builds resiliency to anticipated climate impacts, but also brings other vital social and economic co-benefits for our city.

TARGETS

This CAP update establishes a pathway toward achieving the following targets:



STRATEGIES & ACTIONS

Sector	Strategies	Key Actions
Buildings & Energy	▸ Shift to electric fuels in new and existing buildings to achieve net-zero carbon buildings. ▸ Improve energy efficiency. ▸ Maximize renewable energy generation and storage capacity.	Electrification incentives and requirements for new and existing buildings; building retrofit programs and code; expansion of carbon-neutral electrification; grid storage and resilience
Transportation & Land Use	▸ Transition vehicles to electric alternatives. ▸ Expand clean mobility options and use of non-SOV transportation modes. ▸ Advance sustainable land use.	Expansion of EV infrastructure through incentives and reach codes; improvements to public transportation; expansion of clean mobility options and incentives for walking, biking, and other active transportation modes; promotion of sustainable, dense development
Materials & Consumption	▸ Increase waste diversion. ▸ Reduce landfilled food waste. ▸ Enhance sustainable production and consumption.	Support for waste diversion and food recovery programs; new waste diversion requirements; City programs to promote sustainably produced, packaged, and shipped goods and materials
Natural Systems & Water Resources	▸ Increase tree canopy cover. ▸ Enhance ecosystem resilience. ▸ Improve water supply and conservation.	City tree planting initiatives; ecosystem resilience through sustainable landscaping; water conservation and recycled water incentives and landscaping requirements; increased recycled water use in public parks; conversion of gas to electric-powered landscaping equipment
Community Resilience & Wellbeing	▸ Improve community resilience. ▸ Prepare for climate change.	Expansion of public programs and emergency systems to prepare for climate impacts; incentives for adaptation upgrades; climate resilient infrastructure

IMPLEMENTATION PLAN

The CAP includes a plan for implementing the plan and monitoring and evaluating progress through the implementation phase, including:

- **Timeframes for implementation**, including ongoing actions and those planned for Year 1, near-term (2023-2026), mid-term (2027-2030), and long-term (after 2030) phases.
- **Implementation roles**, including lead departments and key partners.
- **Oversight and accountability**, including a creation of a City Sustainability & Climate Action Team to coordinate implementation and regular public updates and reporting on CAP progress through a Community Dashboard.
- **Monitoring and evaluation**, including annual progress reports and frequent updates of the City's GHG emissions inventory.

INTRODUCTION

Bounded to the north by the San Francisco Bay and to the south by the City of San Jose, the City of Santa Clara sits **nestled in the heart of Silicon Valley**. The nearly 130,000 members of our diverse community enjoy warm summers and mild winters—with 300 days of sunshine each year. Our vibrant **tree-lined neighborhoods and job centers** welcome new residents who enjoy access to over 40 city parks and pools and our 70-mile bicycle network.

Santa Clara is also **home to technology leaders** like Intel and NVIDIA. Our city is distinguished as the primary hub for Silicon Valley data centers—supporting cloud technology giants like Amazon.com, Inc., Microsoft Corporation, and Apple Inc. It's no surprise that over 50 data centers are contained within Santa Clara's modest 19 square miles. Our competitive advantage stems in large part from municipally owned Silicon Valley Power's ability to offer **dependable, low-cost electricity**.

As our city continues to thrive, we are uniquely positioned to lead the way in **balancing economic growth and technological innovation with environmental responsibility**. We will continue to pursue **neighborhood-focused land use policies to increase infill housing developments** that both meet Santa Clara's housing demand and support sustainability efforts through more dense development.

Collectively, we must reduce greenhouse gas (GHG) emissions while building resiliency to climate change within our community to maintain a **vibrant, healthy, and sustainable community for future generations**. The City of Santa Clara is committed to achieving these goals through resourceful, efficient, and progressive leadership.

This update of the City of Santa Clara's CAP reflects the evolving needs of our community and the localized impacts of global climate change. It reaffirms the City of Santa Clara's **commitment to climate leadership** and outlines a path toward a more **sustainable, healthy, and livable future** for all.

VISION FOR A SUSTAINABLE SANTA CLARA

WE ENVISION SANTA CLARA'S FUTURE AS A **HEALTHY, THRIVING, AND SAFE CITY TO LIVE, WORK, AND ENJOY LIFE**, WHERE THE BENEFITS OF LIVING HERE ARE **DISTRIBUTED EQUITABLY AMONG OUR** RESIDENTS, AND WHERE WE BUILD A HEALTHY CLIMATE FUTURE WHILE WE PRESERVE WHAT WE LOVE ABOUT THIS COMMUNITY.

We will achieve this vision by taking an **equitable, inclusive, and pragmatic approach to holistically addressing climate change** in a way that not only reduces greenhouse gas emissions and builds resiliency to anticipated climate impacts, but also brings other vital social and economic benefits to our city. This plan provides a roadmap for reaching this future, guided by the following overarching goals:

Create a more equitable and accessible community.

- Develop sustainability policies and programs in collaboration with voices and groups typically underrepresented, particularly communities of color and **those most at-risk to climate change impacts**.
- Ensure **equitable access** to the high quality of life that Santa Clara offers.

Maintain and enhance our quality of life.

- **Create a healthier, more walkable, bikeable, and affordable community** with ample neighborhood and community parks and useful green space, a connected trail network, clean air, and affordable and convenient public transportation.

Foster thoughtful and inclusive growth.

- Balance economic growth and development with thoughtful, climate-focused city planning that allows us to **live more sustainability** while also supporting our economy, local businesses, and residents.
- Bring **new, green jobs** to our community that are accessible to a range of skill levels.

Make our community more resilient.

- **Engage community members** on climate change and sustainability.
- Ensure our residents have **access to reliable clean water sources**.
- Power our community with **reliable, clean energy sources** that can withstand future strain on the energy grid.
- **Strengthen our public programs and emergency services** to protect community members from future climate impacts.

WHY UPDATE THE CAP?

The City of Santa Clara already plays an important role in electricity provision, building construction, land use and development, transportation, infrastructure maintenance, solid waste management, parks and open space management and maintenance, and water and wastewater management. Accordingly, the City is uniquely positioned to lead on climate action, facilitate collaboration and partnerships, and engage individuals, businesses, community groups, and other local governments to join these efforts.

By updating its 2013 CAP, the City of Santa Clara reaffirms its commitment to leading the way to a more sustainable community. The City has set bold targets and developed strategic pathways for reducing greenhouse gas emissions while increasing the City's resilience to climate change impacts. The 2022 CAP aims to:

1. **Prevent and prepare for the impacts of climate change.**

Leading climate scientists around the world agree:

- **Human activity** is changing the earth's climate through the release of greenhouse gas emissions—caused primarily by the combustion of fossil fuels.
- **Significant and irreversible impacts** will occur if average global temperature increase by 2°C, and that we should strive to limit the temperature increase even further to below 1.5°C.

What is a Climate Action Plan?

A Climate Action Plan is the City's strategic planning document that outlines:

- Current and projected greenhouse gas emissions
- Greenhouse gas emissions reduction targets
- Strategies and actions for reducing emissions
- Projected vulnerability to climate change
- Strategies and actions for building climate resilience

The 2022 Climate Action Plan intends to reflect Santa Clara's unique environment and reaffirms commitment to leading on climate action.

The Intergovernmental Panel on Climate Change projects a wide range of climate changes—including changing precipitation, ocean acidification, more extreme temperature changes, sea level rise, and an increase in extreme events such as heat waves, droughts, floods, cyclones, and wildfires.

Continued emissions of greenhouse gases will cause further warming and long-lasting changes, increasing the likelihood of severe, pervasive, and irreversible impacts for people and the natural systems we depend on.

The City of Santa Clara must take action to prevent the worst impacts of climate change and build resilience to changes that are unavoidable. In the years ahead, Santa Clara can expect to face heat waves, prolonged periods of drought, and longer and more severe regional wildfires that will impact air quality across the West.

2. Reflect the City's changing environment and community.

Addressing climate change involves all of us—residents, businessowners, and city leaders alike. As a result, effective CAPs must reflect the unique values, needs, and concerns of their community. Since the adoption of the 2013 CAP, Santa Clara's community has changed, with our total population having grown by nearly 8,000 residents. To ensure that we reflected the diverse priorities of residents and businesses, the City engaged the public throughout this CAP update process. This CAP also reflects changes in the economic landscape, city demographics, relevant technological advancements, best available climate science, greenhouse gas emissions projections, and the evolving regulatory and political environment.

Identifying and incorporating these changes into the plan helps ensure that targets, strategies, and actions reflect today's realities and tomorrow's future.

3. Align with new state requirements and guidance.

Since adoption of the 2013 CAP, California has continued to set aggressive climate action goals. New legislation requires the City of Santa Clara to meet ambitious carbon reduction targets, reflected in this updated CAP. The "State Regulatory Landscape" section below provides further detail on relevant state policy.

4. Demonstrate climate leadership and commitment.

Since the 2013 CAP was adopted, the City has developed plans and taken action to: expand and improve its pedestrian and bicycle network; decarbonize its buildings through incentives and exploration of reach codes; improve citywide transportation demand management; expand use of electric vehicles (EV) and install EV charging; divert organic waste from the landfill; and expand Silicon Valley Power's renewable energy portfolio to reach 100% of electricity generated from renewable sources by 2045.

The 2022 CAP builds upon these long-term commitments and aligns with work already happening on the ground—led by community groups, universities, individuals, and businesses. For example, the decarbonization of Silicon Valley Power's energy portfolio aligns well with technology companies already developing innovative strategies and setting ambitious internal targets to reduce their emissions. By aligning their climate action missions, the City can continue to work collaboratively with businesses to lead the way in achieving collective climate goals.

5. Maximize co-benefits.

This CAP update provides a series of actions intended to reduce GHG emissions while building resilience to the projected impacts of climate change. These actions are designed to integrate with existing City planning efforts to gain synergies and benefit both the global climate *and* our local community.

For example, by expanding the bicycle and pedestrian network while improving accessibility and safety, the City can continue to encourage biking and walking as alternatives to driving motor vehicles. The co-benefits of this GHG emissions reduction effort allow residents to enjoy safe and accessible corridors and trails for recreation and commuting, while improving air quality and reducing traffic congestion and GHG emissions because of fewer vehicles on the road.

State Regulatory Landscape

California recognizes that GHG emissions and the impacts of climate change are a serious threat to our public health, economic wellbeing, and environment. A leader in climate action since the early 2000s, the State of California is on track to exceed its 2020 climate target of reducing GHG emissions to 1990 levels—while the economy continues to grow.

Since the adoption of Santa Clara's 2013 CAP, the **State of California has adopted multiple climate policies relevant to this updated plan**, such as:

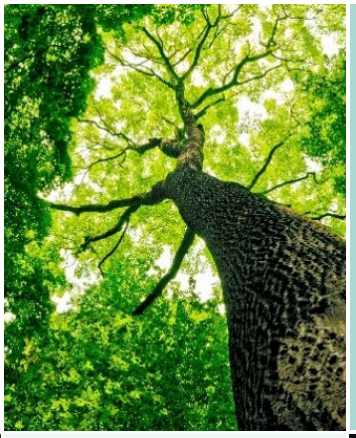
2015 **EO B-30-15**	**Executive Order B-30-15** Establishes a statewide goal of reducing greenhouse gas emissions to 40 percent below 1990 levels by 2030.
2016 **SB-32**	**Senate Bill 32** Expands on AB-32, requiring California to reduce greenhouse gas emissions to 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050.
2018 **EO B-55-18**	**Executive Order B-55-18** Expanded upon EO S-3-05, creating a statewide goal of carbon neutrality by 2045 (in addition to SB-32 targets).

This 2022 CAP reflects near-term SB-32 requirements and progress toward meeting long-term EO B-55-18 targets:

- Reduce greenhouse gas emissions to 40% below 1990 levels by 2030.
- Achieve net carbon neutrality no later than 2045.

SUCCESSES & ACCOMPLISHMENTS

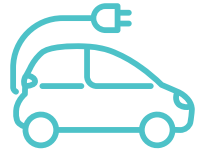
Prior to developing this CAP update, the City of Santa Clara made steady progress on climate action. **Santa Clara's total emissions decreased by 4.5% and per-capita emissions decreased 13% from 2008 to 2016.** Other key accomplishments include:

Coal-free and large renewables	Energy efficiency programs	Transportation and land use	Water and natural systems	Waste reduction
✓ Eliminated coal from the City's energy mix. ✓ Provided carbon-free energy for residential customers.		✓ Reduced 9% of transportation emissions, despite population growth. ✓ Installed over 450 EV chargers in public spaces.		✓ Implemented mixed waste collection and processing to divert organic materials from landfills to satisfy SB 1383 requirements and to increase overall waste diversion rates
	✓ Saved over 165 GWh of energy through energy efficiency incentives, pilot projects, and rebate programs. ✓ Implemented energy efficient practices in all new data centers.		✓ Reduced water use by over 2 billion gallons between 2008 and 2016. ✓ Planted ~4,000 new trees, facilitated by a policy to plant two trees for every one tree removed.	

ASSOCIATED CLIMATE & SUSTAINABILITY PLANNING EFFORTS

Bicycle Master Plan | Updated in 2018, this plan outlines the City's long-term vision for improving the cycling infrastructure through policies, programs, and City-run projects. Initiatives are focused on creating an integrated cycling network, improving safety for cyclists, making cycling a more convenient transportation option, and fostering a more bike-friendly culture in Santa Clara. [1]

Pedestrian Master Plan | Adopted in 2019, this is a blueprint for making Santa Clara more walkable, with particular focus on creating an integrated pedestrian network; making walkways safer, more enjoyable, and easier to navigate; and integrating walking into land use policy to make walking a more convenient mode of everyday transportation. [2]



EV Blueprint Plan | Developed in 2019 through a grant from the California Energy Commission, this blueprint outlines 14 program initiatives to improve Santa Clara's electric vehicle charging infrastructure to prepare to meet the state's goal to increase the number of zero-emissions vehicles to 5 million by 2030. Initiatives include updates to building codes, rebate and incentive programs, public-private partnerships, and changes to construction permitting requirements. [3]

Solar electric incentives | SVP offers the Low-Income Solar Grant Program, which provides free solar panel systems to qualifying residents. [4]

Reach codes | Reach codes refer to local building energy codes that "reach" beyond the minimum requirements for building energy use mandated by the state. Santa Clara's reach codes are focused on electrifying new buildings, improving energy efficiency, and increasing the electric vehicle charging infrastructure. [5]

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[1] City of Santa Clara. 2019. Bicycle Plan Update 2018.
[2] City of Santa Clara. 2019. Pedestrian Master Plan.
[3] City of Santa Clara. 2019. EV Ready Communities Challenge.
[4] Silicon Valley Power. Incentives and Financing Options.
[5] City of Santa Clara. 2019. Building Electrification and Electric Vehicles Reach Codes.

Complete Streets Policy | This policy outlines specific principles for ensuring the city roadways are safe, accessible, and convenient for all transportation types, including pedestrians, motorists, bicyclists, persons with disabilities, and seniors.

Organics Collection and Processing Program | After four years of gathering feedback and exploring alternative options, the City Council approved new contracts with Mission Trail Waste Systems (collection) and GreenWaste Recovery (processing) to provide residents and businesses with mixed-waste processing, a process that captures organic waste from the contents of garbage containers. Beginning January 2021, the organic material captured by mixed waste processing will be taken to a composting facility. [6]

Creek Trail Master Plan Expansion | Identified as a priority by the City Council in 2013, this trail expansion plan improves the existing on-street bicycle transportation system by developing bicycle and pedestrian creek trails along 5.75 miles of Calabazas Creek Corridor, 3.25 miles of Saratoga Creek Corridor, and 1.75 miles of the Hetch Hetchy corridor. [7]

City Green Fleet Policy | Directed in 2019, this policy effort ensures that the City purchases and uses the lowest emission vehicles available to reduce vehicle emissions, consumption of non-renewable resources, and maintenance and operating costs to the city. [8]

Urban Water Management Plan (UWMP) | Updated every five years, the UWMP provides an overview of the City's current and long-term water supplies, future water needs of the city, and the City's water conservation programs. The 2010 UWMP established a baseline target use goal of 186 gpcd (gallons per capita per day) per the Water Conservation Act of 2009 (SBX7-7). The City committed to achieve a 20% reduction in per capita water use by 2020. The City met this goal by achieving a calculated gpcd of 124 in 2020, saving approximately 6,328-acre feet (2,060 MG) of water from 2008 to 2016. [9]

Transportation Analysis Policy | Adopted in 2020, this policy establishes the requirements for evaluating land use and transportation projects based on the estimated vehicle miles traveled (VMT) for that project. [10]

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[6] City of Santa Clara. 2021. Residential Food Scrap Recycling Pilot Program Update.
[7] City of Santa Clara. 2013. City of Santa Clara Creek Trail Network Expansion Feasibility Study.
[8] City of Santa Clara. 2019. City Manager's Directive 135-Green Fleet Policy.
[9] City of Santa Clara. 2020. Urban Water Management Plan.
[10] City of Santa Clara. 2020. Transportation Analysis Policy.

Specific Plans: Downtown, El Camino Real, Patrick Henry Drive, Freedom Circle, Tasman East | These neighborhood-specific plans outline General Plan development areas of Santa Clara where there is opportunity to intensify with limited impact on the existing neighborhood. Plans include initiatives focused on making the areas more pedestrian friendly and promoting sustainable, dense housing developments. [11]

Green Stormwater Infrastructure (GSI) Plan | GSI uses vegetation, soils, and natural processes to manage rainwater and improve water quality. Adopted in 2019, The GSI Plan provides a roadmap for how the City will gradually transform traditional storm drainage systems from "gray" to "green" by incorporating GSI into projects in the public and City-owned properties. [12]

Sustainable Purchasing Policy | The goal of the City's Sustainable Purchasing Policy is to strive to purchase products that minimize environmental impacts, toxins, pollution, and hazards to workers and the community. To the greatest extent practicable, the City will purchase products with the following characteristics:

- Are made with recycled content.
- Conserve energy and water.
- Reduce greenhouse gas emissions.
- Use unbleached or chlorine-free manufacturing processes.
- Are lead and mercury free.
- Use wood from sustainably harvested forests.
- Meet SB 1383 post-consumer recycled content paper purchasing requirements.

Adoption of Park and Recreational Land Dedication Ordinance | The goal of the addition of Chapter 17.35 to the City Code in July 2014 is to provide 2.6 to 3.0 acres of new developed parkland and recreational amenities in new residential development properties, pursuant to the California Quimby Act and the Mitigation Fee Act. New parkland in sufficient size, usable shape, and location near residential density provides quality of life, carbon sequestration, as well as natural habitats.

[11] City of Santa Clara. Specific Plans.
[12] City of Santa Clara. 2019. Green Stormwater Infrastructure Plan.

PLAN DEVELOPMENT PROCESS

This update of the City of Santa Clara's CAP reflects and brings together City and community priorities developed through a robust, two-year involvement and assessment process. The primary objective of this process was to build a plan that is comprehensive, grounded in Santa Clara's unique context, and reflects community priorities and needs. The process included the following key elements:

BASELINE ASSESSMENT

- 2013 CAP progress review
- Greenhouse gas inventory review
- Emissions forecasting and modeling

TARGET SETTING

- Target, goal, key performance indicator (KPI) development
- City staff meetings
- Focus groups (#1)
- Online survey (#1)
- Planning Commission review

ACTION DEVELOPMENT

- Mitigation and adaptation strategy and action development
- City staff meetings
- Multi-criteria and quantitative analysis
- Community workshop (#1)
- Online survey (#2)
- Planning Commission review
- City Council review

CAP DEVELOPMENT

- Focus groups (#2)
- Community workshop (#2)
- Public comment period
- Planning Commission review
- City Council review and adoption

COMMUNITY ENGAGEMENT

The City of Santa Clara engaged the community throughout the climate action planning process. Despite pivoting to an entirely virtual community engagement strategy due to COVID-19, the City engaged with hundreds of people and received over 1,000 comments throughout the CAP development process. The primary objectives of this outreach were to:

- Reflect the community's **values and priorities**.
- Engage a **broad representation** of stakeholders—including participants who are typically not engaged in planning.
- Gather **feedback** about how to reduce emissions and make Santa Clara a more sustainable place to live and work.
- **Educate** the community about the importance and urgency of climate action.
- **Empower** residents, stakeholders, City staff, and decision-makers to implement the CAP after its adoption.

To try and reach as many people as possible, the City engaged residents through a variety of channels over the two-year climate action planning process, including targeted stakeholder focus groups, online surveys, virtual workshops, public comments at the Planning Commission and City Council Study Sessions, and public comment period to review the draft plan. Looking ahead, the City will continue to engage the community as we move toward implementing the CAP.

Community Feedback

Target Setting		Select Strategies and Actions			Draft and Finalize Plan	
APRIL 2020	JUNE - JULY 2020	JULY 2020	OCT-NOV 2020	JULY 2021	SEPT 2021	OCT 2021
Focus groups	**Survey #1**	**Virtual Community workshop**	**Survey #2**	**City Council Feedback and Directives**	**Virtual Public Workshop and Online Platform**	**Virtual Focus Groups**
Summary of Feedback: • Balance housing and job markets. • Improve regional mobility. • Align reduction targets with peer cities and state regulations. **Focus groups with:** *Santa Clara Chamber of Commerce; Silicon Valley Leadership Group; Digital Realty; Santa Clara Youth Commission; Santa Clara University; ABAG; Silicon Valley Bicycle Coalition; Santa Clara Ped & Bike Committee*	**Summary of Feedback:** • Greatest barrier to addressing climate change in Santa Clara: "lack of public education or awareness." • Most important climate-related issue: "renewable energy." • Greatest climate-related threats: "drought" and "worsened air quality." • Preferred emissions target: "faster than state targets."	**Summary of Feedback:** • Prioritize equity. • Increase amount of renewable energy provided by SVP. • Develop strong transportation demand management plans. • Improve transportation network for bicyclists and pedestrians.	**Summary of Feedback**: • Preference for voluntary and incentive-based measures. • Reduce VMT by encouraging use of public transit, carpooling, biking, walking. • Increase solar and battery storage. • Plant/preserve trees and gardens; more public parks. • Reduce waste. • Increase public education and engagement.	**Summary of Feedback:** • Adopt an interim 80% GHG reduction target by 2035. • Enact new CAP actions to reach interim target, including adopting a burn out ordinance for gas furnaces and water heaters and requiring secured bicycle parking at multi-family properties. • Relax proposed TDM requirements for select businesses and residential properties.	**Summary of Feedback:** • Clarify how the CAP actions align with other City planning efforts, particularly reach codes. • Clarify the incentives integrated into the CAP—what they will include and how the City plans to promote them. • Expand private sector partnerships and seek other opportunities to engage the business community and promote sustainable business practices.	**Summary of Feedback:** • Prioritize incentives to mitigate cost concerns. • Explore ways to use the CAP to address existing income disparities. • Emphasize collaboration and resource sharing. **Focus groups with:** Organizations representing, • The unhoused population, low-income residents, and other vulnerable groups; • Asian American, Muslim American, and other underrepresented groups; • Contractors, developers, and other members of the building community.
20 participants	387 respondents	38 participants	496 respondents		20 workshop participants; 33 online comments	20 participants

Centering equity

Climate change disproportionately affects vulnerable and marginalized communities, such as communities of color, low-income populations, those with disabilities, and those experiencing homelessness or housing insecurity.

The City of Santa Clara recognizes that addressing the challenges of climate change will require **uprooting systemic inequalities** to uplift and strengthen the most at risk in our community and provide opportunities and benefits for all. Solutions must begin by questioning whether strategies and actions benefit some while burdening others.

By committing to the implementation of this CAP, the City of Santa Clara has prioritized cross-cutting solutions that support **long-term equity, resilience, public health, and community wellbeing.**

As we move forward, the City of Santa Clara must prioritize **shared benefits, accessibility, capacity-building, partnerships, and accountability** throughout the community.

We will take advantage of the actions already underway to **meet our climate goals**, **uplift our community**, and ensure no one is excluded from the additional **benefits of a healthier, low-carbon future**.

Equity Elements in the Updated CAP

Community Engagement

- ✓ Engaged Santa Clara's diverse community throughout the CAP process through inclusive, accessible outreach strategies.

Emissions Reduction Targets

- ✓ Acknowledges the City's responsibility in reducing global emissions to slow the impacts of climate change.

Strategies & Actions

- ✓ Prioritized actions that reduce historical or current disparities among communities of color, low-income populations, and other marginalized groups.

Plan Implementation

- ✓ Developed implementation plan that considers how to make benefits broadly accessible and shared among the community without disproportionately burdening vulnerable groups.

CLIMATE CHANGE IN SANTA CLARA

Santa Clara commits to maintaining the progress made and rising to the new challenges that climate change brings.

Left unchecked, climate change will undo the progress we have made as a city. Changing conditions will significantly impact Santa Clara's economic, ecological, and social systems that make up our daily lives. Climate impacts are projected to become more severe in the future, leading to disruptions to our critical facilities and services, such as disturbances to our highways and transportation systems, destruction of assets and property, power outages, water scarcity, and increased utility rates. The City must meet the moment and continue to adapt and evolve with the changing needs.

Action today will prepare our city for future climate impacts.

By reducing GHG emissions, Santa Clara can help prevent some of the most severe climate impacts. However, some impacts are now unavoidable, and the City must prepare by making our community more resilient through initiatives aimed to protect vulnerable populations, strengthen vital infrastructure, and preserve natural ecosystems critical to a balanced climate.

Proactive local climate action is vital for achieving carbon neutrality by 2045.

As shown below, the two major sources of remaining emissions are projected to be transportation and natural gas at 53% and 35% of projected 2045 emissions, respectively. Emissions from waste and wastewater treatment are projected to continue to rise, together making up the remaining 12% of total 2045 emissions.

The majority of Santa Clara's current greenhouse gas emissions stem from non-residential electricity use. State policies and carbon-free electricity will allow Santa Clara's emissions to decrease approximately 72% by 2045, leaving emissions from transportation, natural gas, waste, and wastewater treatment remaining. This plan sets us on a pathway for addressing these remaining emission sources and reaching carbon neutrality.

CLIMATE RISK & VULNERABILITY

Santa Clara is already experiencing climate change impacts, which will continue to worsen in the years to come unless we take action. These climate impacts pose a serious threat to our economy, health, and quality of life. Potential consequences to our community include:

Extreme Heat

Santa Clara County is expected to see an increase in annual average temperature of 2-4°F by 2050 and 4-6°F by 2100. [13]

Riverine Flooding

The probability of a 100-year flood event in Santa Clara County could be 10-20% higher by 2050 and 30-40% higher by 2100.

Threats to Public Health

Extreme heat will cause more heat-related illness and hospitalizations.

Increased allergens and harmful air pollutants due to higher temperatures will put people with asthma and other vulnerable populations at higher risk of health complications.

Sea Level Rise & Coastal Flooding

The San Francisco Bay is projected to rise:

6 inches by 2030

11 inches by 2050

36 inches by 2100

Wildfire

The Bay Area is one of the more risk prone areas in the state. Regional wildfires threaten Santa Clara's air quality, supply chain and distribution channels, and water quality.

Threats to habitat and critical species

Wildfires, warming temperatures, and changing precipitation patterns will disrupt forests, streams, and other critical habitats that are home to important local species.

Economic Impacts

More extreme temperatures and weather patterns threaten agriculture and food security, tourism, outdoor recreation, and other seasonal and climate-dependent industries. Resource fluctuation also threatens products and service costs.

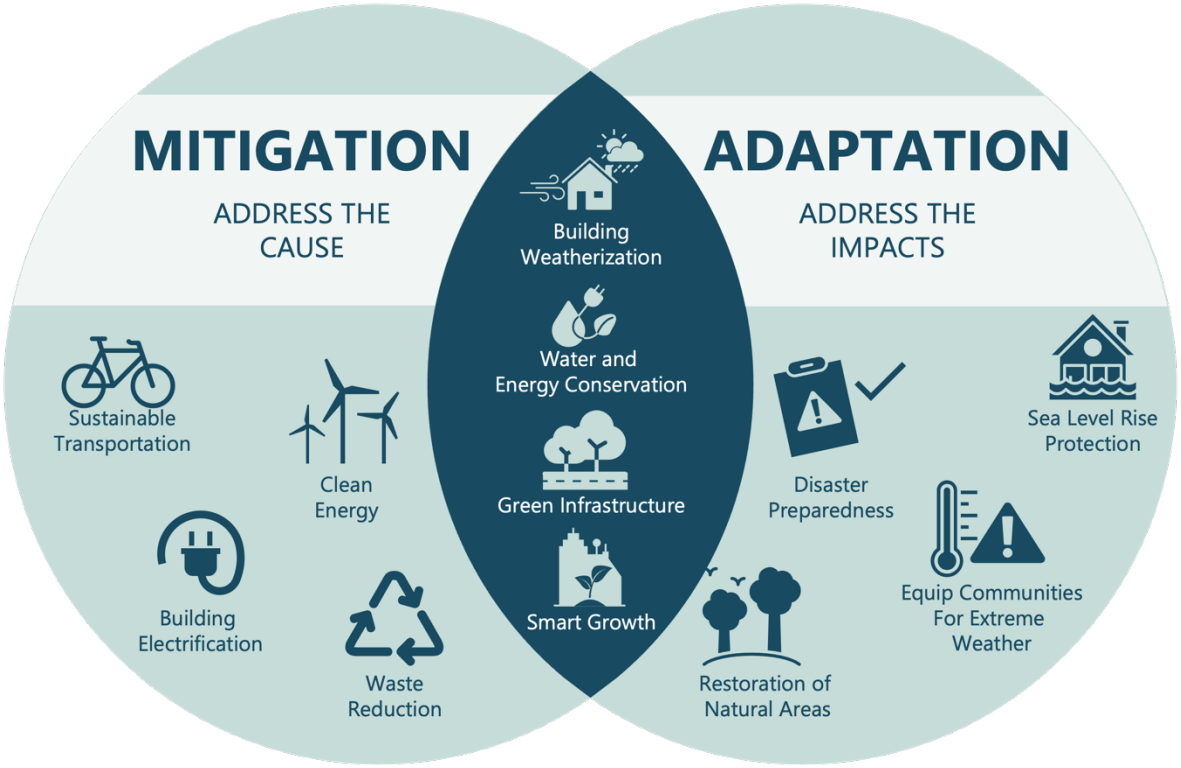
[13] Cal Adapt. 2013. Climate Tools.

FOSTERING CLIMATE RESILIENCE

This CAP was developed using a two-pronged approach: reducing greenhouse gas emissions to slow the effects of climate change (mitigation) while building resiliency to the inevitable impacts of climate change (adaptation):

- **Mitigation actions** aim to prevent and slow down the impacts of climate change by reducing greenhouse gas emissions and increasing carbon "sinks" (oceans, forests, and soil) to store these gases.
- **Adaptation actions** manage the impacts of climate change by protecting vulnerable populations, ecosystems, natural resources, and infrastructure.

The figure at right outlines examples of climate mitigation and adaptation activities.



Successful climate change preparation includes both reducing climate-related vulnerabilities and preparing to respond to and recover from impacts as they occur.

SANTA CLARA'S GREENHOUSE GAS EMISSIONS PROFILE

Emissions Trends (2008 to 2016)

Santa Clara's **greenhouse gas emissions declined 4% from 2008 to 2016**—despite growth in Santa Clara's economy and a population increase of 10% over the same period. **Per-capita emissions also decreased**, declining 13% over the same period.

As Silicon Valley Power (SVP) provides electricity to over 50 major data centers in the city, it is no surprise that the **non-residential energy sector contributed over 60% of total community emissions.** As a municipal utility, SVP's ability to offer dependable, low-cost electricity makes Santa Clara a hub for these large data centers. Balancing the city's role as a technology hub with the need to reduce its climate footprint highlights the importance of 'cleaning the grid' to provide affordable, and renewable or carbon-neutral electricity to commercial customers.

Total emissions decreased in nearly every sector between 2008 and 2016. As detailed in the graphics on the following page, Santa Clara made the largest reductions in non-residential natural gas emissions. Transportation emissions decreased the least, indicating opportunity for further progress in this sector in the years ahead. Non-residential electricity emissions, meanwhile, increased by nearly 22% between 2008 and 2016. This increase was attributed to post-recession economic growth and the increase in data centers built during that period.

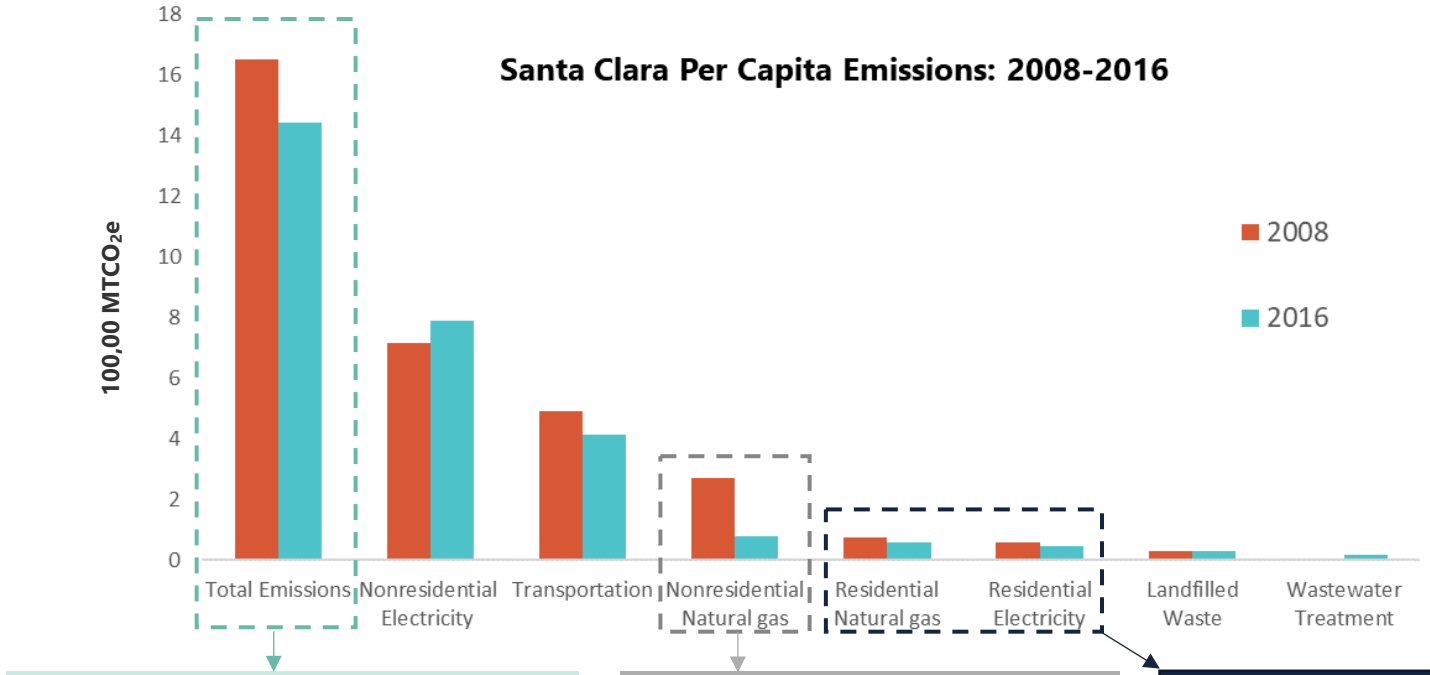
Emissions Forecast (2016 to 2045)

In 2018, SVP eliminated coal from its energy mix and now provides carbon-free energy to all residential customers, eliminating emissions from residential electricity. California's Renewable Portfolio Standard (RPS) requires electricity sold by utilities to be 33% renewable by 2020, 60% renewable by 2030, and 100% carbon-free by 2045. As a result, **emissions from electricity are expected to zero out by 2045**.

The 2016-to-2045 forecast, shown on page 22, reflects population growth projections, as well as reductions from state measures such as Title 24 building code standards, vehicle efficiency standards, and electric vehicle adoption. It shows that **current state policies and carbon-free electricity will allow Santa Clara's emissions to decrease approximately 70% by 2045**.

Two major sources of emissions are projected to remain: transportation and natural gas at 53% and 35% of projected 2045 emissions, respectively. Emissions from solid waste and wastewater treatment are projected to continue to rise, together making up the remaining 12% of total 2045 emissions. This forecast illuminates that California's state policies alone won't get us to our end goal; **the strategies and actions developed in this City of Santa Clara CAP are critical for a carbon-neutral future.**

Communitywide Greenhouse Gas Emissions Trends



- Between 2008 and 2016, **total emissions declined** by around 4%, despite the city's population growing by 10%. **Per-capita emissions** declined by 13%.

2008		2016
1,862,824 MTCO2e	-4%	1,790,833 MTCO2e
16.5	-13%	14.4

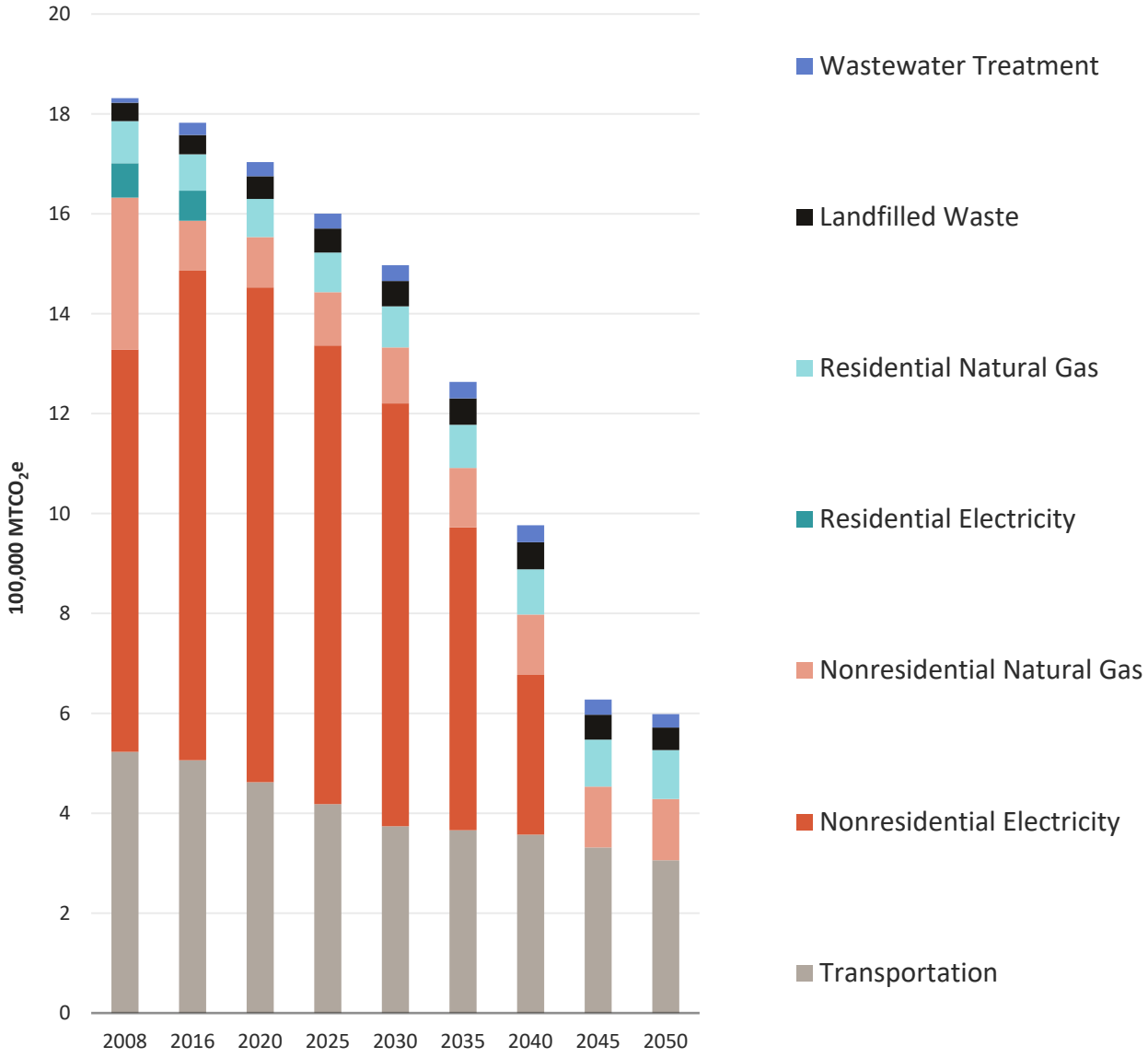
- **Non-residential natural gas decreased the most** of any sector; total emissions declined by 67% and per-capita emissions declined by 70%.

2008		2016
304,181 MTCO2e	-70%	99,945 MTCO2e

- Residential electricity and natural gas per-capita emissions **both declined by around 20%.**

2008		2016
E: 0.61 NG: 0.75 MTCO2e	-20%	E: 0.48 NG: 0.59 MTCO2e

Communitywide Greenhouse Gas Emissions Forecast



Even without this CAP, Santa Clara's GHG emissions are projected to decline in the future—largely due to the influence of federal, state, and regional policies:

- **SB-100** requires that 100% of electricity sold by utilities be carbon-free in 2045.
- **Title 24** specifies how new buildings must be constructed, including specifying minimum energy efficiency standards; California has set a goal for zero-net energy new construction by 2030.
- **Clean Car Standard** requires that vehicles sold in California meet minimum fuel efficiency requirements, and that fuel sold in the state emits less GHGs during production and use.
- **SB 1383** requires that food scraps and other organic material is diverted from landfill disposal such that 75% of organic material is diverted from landfill by 2025.
- **EO N-79-20** sets a goal that 100% of in-state sales of new passenger vehicles and trucks are zero-emission vehicles.

CARBON NEUTRAL 2045

This CAP update establishes a pathway toward achieving:

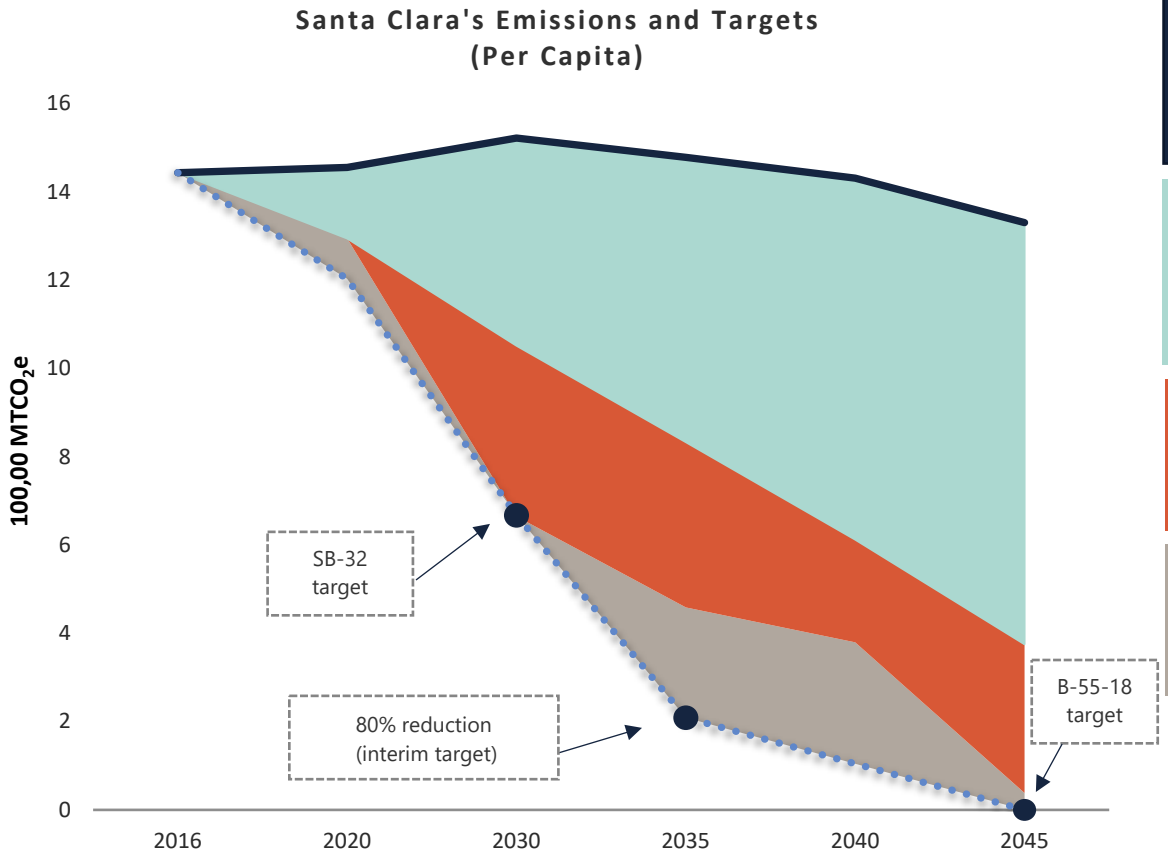
- **SB 32 requirements:** a 40% reduction in emissions by 2030.
- **Our interim target:** an 80% reduction in emissions by 2035.
- **EO B-55-18 target:** net carbon neutrality by no later than 2045.

These goals reflect community and City feedback to **set bold targets to address climate change**—getting ahead of anticipated state regulations and aligning with peer communities. Carbon neutrality refers to **net zero greenhouse gas emissions caused by fossil fuel use within the city**.

This CAP includes innovative strategies and actions to significantly reduce greenhouse gas emissions into the future—but technological constraints may prevent reducing emissions to absolute zero by 2045. As a result, **to achieve carbon neutrality, we will need to offset every ton of CO_2e emitted with an equivalent amount of CO_2e removed** through a combination of nature-based solutions, carbon capture technology, and other carbon offset options.

SANTA CLARA EMISSIONS AND TARGET PATHWAYS

As illustrated in the graphic below, we will need to proactively take local climate action to reduce and offset greenhouse gas emissions to achieve our targets. State and regional policies and regulations are projected to reduce 2045 business-as-usual (BAU) emissions by 72%. The actions within this CAP are projected to further reduce emissions by 25%.



Business-As-Usual (BAU):

An estimate of how emissions would grow over time without any climate action.

External Factors:

The influence of federal, statewide, and regional policies (e.g., California's Renewable Portfolio Standard) will have on Santa Clara's projected emissions.

CAP Actions:

The estimated collective impact of the actions in this CAP.

Additional Actions to Reach Goal:

The additional emissions reduction needed after implementing external policies and CAP actions.

Targets:

- Reduce emissions by 40% by 2030 (**SB-32**).
- Reduce emissions by 80% by 2035 (**Interim**).
- Carbon neutral by no later than 2045 (**B-55-18**).

80% BY 2035: HOW WILL WE GET THERE?

The chapter that follows outlines Santa Clara's adopted strategies and actions that will collectively meet state GHG reduction requirements in the near-term (40% reduction by 2030) and set the city on a pathway to achieve carbon neutrality in the long-term (by 2045). In addition to these targets, the City aspires to reduce emissions more aggressively in the near-term: achieve an **80% reduction in emissions by 2035.** [14]

To achieve this interim target, one of the key actions that Santa Clara would need to take is to transition to a carbon-neutral electricity fuel mix. This would depend on SVP achieving 100% carbon neutral electricity by 2035, which may require rate increases of 45% to 55% over the 15-year course of the CAP. This increase could equate to approximately double the typical annual rate increases for SVP customers.

Full implementation of actions in this CAP will also be critical for achieving long-term emission reductions, including the following:

1. Target building and transportation electrification through implementation of the all-electric reach codes adopted in November 2021 requiring all-electric new construction (with some exceptions) and including robust EV charging (Action B-1-5; Action T-1-2).
2. Prepare a "burn out policy" to replace natural gas furnaces and water heaters with an electric equivalent (Action B-1-6).
3. Require all new data centers to operate on 100% carbon neutral energy, with offsets as needed (Action B-1-7).
4. Require a 25% reduction in project-based VMT through active Transportation Demand Management (TDM) measures for large employers over 500 employees, including aggressive regulations to reduce parking, in new developments (Action T-3-1).
5. Adopt a 20% reduction of VMT for multifamily residential with a 10% reduction through active TDM measures, which may require parking maximums, in new developments (Action T-3-1).
6. Require advanced EV charging stations and secured bicycle parking at new residential developments (Action T-1-2).

[14] This plan is focused on achieving a per service population reduction. Service population in this context refers to total Santa Clara residents plus total Santa Clara job force/employees.

STRATEGIES & ACTIONS

The strategies and actions in this plan reflect Santa Clara's unique context and role in taking climate action. Considerations include:

- **Utility ownership.**
  Silicon Valley Power electricity utility is municipally owned, which grants the City direct control over utility operations, business decisions, and related program activities.

- **Progressive state and regional activities**.
  California has introduced ambitious climate policies and regulations, as well as tools and resources for supporting local climate action. Santa Clara's strategies align with other California cities—setting ambitious emissions reduction targets and leading the nation in local climate action planning.

- **Data center hub in the center of Silicon Valley.**
  Santa Clara's electric utility provides unique opportunities for the provision of carbon neutral energy options. SVP will continue to work with Data Center developers who are interested in procuring additional renewable resources earlier than required by law.

- **An engaged community with a vision for a more sustainable future**.
  Our community is engaged on climate change issues, particularly in relation to transportation and expanding community green spaces.

The following strategies and actions collectively work toward achieving our long-term goal of carbon neutrality no later than 2045.

STRATEGIES & ACTIONS AT-A-GLANCE

Buildings & Energy

Transition to clean renewable energy sources and reduce energy consumption.

Strategy B1	Shift to electric fuels in new and existing buildings to achieve net-zero carbon buildings.
B-1-1	Electrification incentives & financing
B-1-2	Electrification outreach for commercial & residential energy upgrades
B-1-3	Electric panel upgrades upon sale/turnover
B-1-4	Municipal Electrification Action Plan
B-1-5	Reach codes for new construction
B-1-6	Burn out ordinance
B-1-7	Carbon-neutral data centers
Strategy B2	**Improve energy efficiency.**
B-2-1	Municipal energy retrofits
B-2-2	Free home energy upgrades for qualifying residents
B-2-3	Energy-efficient and electric-ready building code
B-2-4	Distributed energy resource pilots
B-2-5	Energy efficiency incentives
Strategy B3	**Maximize renewable energy generation and storage capacity.**
B-3-1	SVP Integrated Resource Plan (IRP) for carbon-neutral electricity
B-3-2	City-owned renewable energy projects
B-3-3	Renewable installations at municipal facilities
B-3-4	Renewable energy generation & storage on private property
B-3-5	Local grid resiliency & energy storage improvements
B-3-6	Alternative backup generators
B-3-7	Renewable electricity for new data centers

Transportation & Land Use

Transition to clean and efficient mobility options and transportation modes while maintaining accessibility and mobility for all.

Strategy T1	**Transition vehicles to electric alternatives.**
T-1-1	Community EV Blueprint implementation
T-1-2	EV charging for all new construction
T-1-3	City Fleet Electrification Plan implementation
T-1-4	Heavy duty electric trucks
T-1-5	Municipal charging infrastructure
Strategy T2	**Expand clean mobility options and use of non-SOV transportation modes.**
T-2-1	Pedestrian & Bicycle Master Plans implementation
T-2-2	Curb management improvements
T-2-3	Bike & shared mobility improvements
T-2-4	Transit gap & improvement study
Strategy T3	**Advance sustainable land use.**
T-3-1	TDM plan requirements
T-3-2	Sustainable development in underutilized non-residential areas
T-3-3	Transit-oriented development
T-3-4	Telework
T-3-5	Transportation Analysis Policy compliance

Materials & Consumption

Increase diversion of waste from landfills, reduce communitywide waste generation, and reduce the upstream GHG impacts of consumption.

Strategy M1	**Increase waste diversion.**
M-1-1	Compliance with state solid waste ordinances
M-1-2	Waste diversion pricing signals
Strategy M2	**Reduce landfilled food waste.**
M-2-1	Technical assistance to top food generators
M-2-2	Food recovery & donation
M-2-3	Food recovery organization partnerships
Strategy M3	**Enhance sustainable production and consumption.**
M-3-1	Reuse of salvageable building materials
M-3-2	City property consumption & waste diversion
M-3-3	Municipal Sustainable Procurement Policy
M-3-4	Carbon-smart building materials
M-3-5	Low-carbon schools

Natural Systems & Water Resources

Foster nature-based solutions, climate-resilient natural landscapes, and help store more carbon in trees and soils. Conserve community water resources by maximizing water efficiency to ensure a secure and sustainable water supply in the face of climate change.

Strategy N1	**Increase tree canopy cover.**
N-1-1	Right-of-way tree planting
N-1-2	Private property tree planting support
N-1-3	Urban forest partnerships
N-1-4	Tree maintenance, replacement, & plantings
Strategy N2	**Enhance ecosystem resilience.**
N-2-1	Carbon farming on open space lands
N-2-2	Partnerships for compost management
N-2-3	Sustainable planting guide
N-2-4	Sustainable park management
Strategy N3	**Improve water supply and conservation.**
N-3-1	Water conservation rebates
N-3-2	Fixture replacements
N-3-3	Water-efficient landscaping requirements
N-3-4	Community water portfolio diversification
N-3-5	Recycled water connection requirements

Community Resilience & Wellbeing

Ensure Santa Clara is prepared and can withstand climate and non-climate emergencies, focusing on those at highest risk.

Strategy C1	Improve community resilience.
C-1-1	Community resilience networks
C-1-2	Support for people experiencing homelessness
C-1-3	Community climate action grant
C-1-4	Incentives for adaptation upgrades
Strategy C2	**Prepare for climate change.**
C-2-1	Climate-resilient land use & development
C-2-2	On-site & natural stormwater systems
C-2-3	High-albedo parking lots
C-2-4	Climate Resilience Capital Improvement Program (CIP)
C-2-5	Planned retreat strategies

A Strategic Approach

We will work to achieve carbon neutrality no later than 2045 by building upon the progress we have already made and adopting new emissions reduction strategies and actions. Together, these strategies and actions (1) provide a **framework for reaching carbon neutrality**; (2) make Santa Clara **more resilient to future climate impacts**; and (3) have important **social and economic benefits**, such as addressing historic inequities, creating green jobs, increasing community green spaces, and improving public health. The table below describes our phased, strategic approach for reaching our climate goals.

Focus immediately on expanding Santa Clara's **transition to clean electricity** by phasing out all remaining fossil fuel-sourced electricity. This transition is key in reducing emissions from both buildings and transportation and meeting our long-term goals.	Meanwhile, significantly reduce emissions from energy by **making buildings more energy efficient** while electrifying appliances and infrastructure. At the same time, **reduce transportation emissions** by expanding electric vehicle adoption and shifting away from single occupancy vehicles.	As the electricity fuel mix gets cleaner with a higher percent of renewable sources, we can ensure that our community is prepared by **phasing out natural gas infrastructure and fossil fuel-based transportation.** We will do this by electrifying new and existing buildings and transitioning to electric vehicles.	As we reduce emissions from transportation and energy, **we will also expand our zero waste and sustainable consumption programs**. These programs will divert organic waste from landfills, where it produces potent methane emissions, and will help community members to buy less generally, which reduces upstream emissions from material production and consumption.	Throughout this process, **we will also focus on local carbon sequestration projects**, including expanding local tree planting programs and adopting nature-based solutions that protect and restore natural systems and naturally capture and store carbon. Carbon sequestration is vital in reaching carbon neutrality and will help Santa Clara close any gaps left by other initiatives.

Climate Adaptation & Resilience | In addition to reducing GHG emissions, Santa Clara will also strategically **integrate adaptation and resilience actions** throughout the CAP implementation—simultaneously both **preventing and slowing down** the worst climate impacts while also **preparing** the community for impacts that are unavoidable.

Embedding Co-Benefits & Equity

In developing the strategies and actions in this CAP, the City considered how strategies and actions contribute to social and economic co-benefits, such as creating green jobs, or enhancing public health by supporting healthier lifestyles. Co-benefits refer to the additional benefits an action brings to the city, or ways it helps meet other City goals. Co-benefits are indicated with the icons below throughout the Strategies & Actions section of this plan. **While many actions have a range of co-benefits, actions with one or more of the below icons highlight those with a particularly strong contribution**.

Specific equity considerations included:

- Who will the action benefit and/or burden?
- Are the benefits broadly accessible?
- Does the action incorporate meaningful, authentic, and culturally appropriate engagement?
- Does the action support long-term relationships and trust between communities and local government?

	**Climate Resilience** Action is a vital, or foundational step, for improving strength against climate hazards like hotter temperatures, floods, wildfire, and drought.		**Ecosystem Health** Action helps expand protection and preservation of habitats, species, water, or air quality.
	**Public Health** Action supports enhanced health and longevity. Improving our environment to prevent lung, heart, and other diseases.		**Cost Savings** Action supports increased efficiencies, reduced health care expenses, and lower energy bills provide more money for other needs and investments.
	**Green Job Creation** Action encourages investment, jobs, and local dollars from construction, energy, transportation, and more.		**Emissions Reduction** Action leads to a relatively significant reduction in emissions or is a foundational step for reducing emissions.
	**Equity** Action has high potential to reduce or redress historical or current disparities.		**Implementation Considerations** Action has specific implementation considerations to ensure equitable outcomes.

BUILDINGS & ENERGY

Goal: Transition to clean, renewable energy sources and reduce energy consumption.

Nearly 70% of Santa Clara's GHG emissions come from our buildings and energy use—making it one of our greatest opportunities to reduce emissions. California state's requirements under SB-100 are anticipated to reduce GHG emissions from electricity to net zero by 2045. To further reduce GHG emissions from our buildings and energy consumption, we will implement the following strategies.

Strategy	Estimated GHG reductions from baseline year ($MTCO_2e$)		
	2030	2035	2045
▸ **Shift to electric fuels in new and existing buildings to achieve net-zero carbon buildings**. Actions include expanding incentive programs to support the electrification of residential and commercial buildings, transitioning all municipal buildings to electricity, and adopting construction requirements and building codes to electrify new buildings.	40,000	79,000	194,000
▸ **Improve energy efficiency** by using our energy more efficiently through retrofits to our homes and buildings. Actions include adopting building codes and other policies that enhance energy efficiency, offering residents and business owners rebates and other financing to offset the cost of energy efficiency upgrades, and conducting comprehensive energy efficient retrofits at municipal facilities.	67,000	77,000	114,000
▸ **Maximize renewable energy generation and storage capacity**. Actions include installing solar and other renewables at City-owned facilities, piloting new renewable energy technology in municipal buildings, and expanding financial support for residents to add renewable energy generation and storage systems to their homes.	180,000	135,000	-

Strategy B1: Shift to electric fuels in new and existing buildings to achieve net-zero carbon buildings

Action B-1-1: Electrification incentives & financing

Work with BayREN and other local jurisdictions and agencies to expand current financial incentives to accelerate electrification in new and existing buildings, which could include (1) options for low- or zero-interest financing; and/or (2) targeted upstream and midstream incentives to distributors and contractors. [15] Rebates could be structured by income level and prioritized for rental units to be used for panel upgrades, passive home design features, electric appliances, heat pumps, and renewable energy generation coupled with storage. The City will continue to promote and advertise available incentives through its website, newsletters, and other available platforms.

Co-benefits:

- Saves costs through incentives and financing for residents to make buildings more energy efficient.

Implementation Considerations:

- Structure rebates in a way that reduces barriers to adoption, such as offering direct install options for low-income residents.
- Target outreach to affordable housing organizations and other entities that could particularly benefit from financial incentives.
- Partner with BayREN to explore opportunities for expanding commercial incentives to large corporations as well as small- and medium-sized businesses.

[15] More information on current incentives is available at Rebates & Financing | Bay Area Regional Energy Network (bayren.org).

Action B-1-2: Electrification outreach for commercial & residential energy upgrades

Continue to promote commercial and residential energy efficiency and electrification upgrades (such as heat pump water heaters and electric panel upgrades) through education and outreach, which could include creation of a clearinghouse of trained/certified contractors and professionals.

Co-benefits:

- Supports green job creation by equipping local contractors with the tools they need to complete building electrification and efficiency projects.

Implementation Considerations:

- Recognize the challenge of promoting energy upgrades to certain demographics, such as renters and small business owners. Focus outreach efforts on reaching decision-makers affecting these groups, such as landlords and property owners and managers.

Action B-1-3: Electric panel upgrades upon sale/turnover

Require electric panel upgrades as appropriate upon sale and/or rental turnover for low-rise residential and small multifamily and commercial buildings to facilitate the transition to clean electricity buildings and vehicles.

Implementation Considerations:

- Explore options for completing upgrades across the whole building or unit-by-unit to determine the most effective approach.
- Clearly define which residential buildings are considered "small multifamily."

Action B-1-4: Municipal Electrification Action Plan

Work with regional energy partnerships to develop and implement a Municipal Electrification Action Plan for City facilities that includes identified funding sources and specific timelines for completion. This will include fuel switching in new and existing buildings, incorporating strategies to address energy storage, focusing on highlighting any hurdles or solutions that would be applicable to the broader community, and leveraging existing rebates.

Action B-1-5: Reach codes for new construction

Implement all-electric reach codes, with exceptions. These codes would require:

- The All-electric building electrification with electric vehicle charging reach code ordinance would apply to all new all new building permit applications per City Ordinance 2034.

Implementation Considerations:

- Explore educational campaigns and outreach opportunities to engage with local contractors, developers, and other members of the building community to ensure they have the technical capacity and knowledge to comply with reach codes.

Action B-1-6: Burn out ordinance

Prepare a "burn out" ordinance requiring that when natural gas furnaces or water heaters expire, they must be replaced with available electric alternatives.

Implementation Considerations:

- Explore offering exemptions and expanding financial support for income-qualified residents to ensure that replacement costs are not unduly burdensome to low-income or income-qualified residents.
- Consider who will bear the cost of upgrades in rental units—building owners, landlords, and/or tenants—and implement outreach and financial support programs accordingly upon policy enaction.

Action B-1-7: Carbon-neutral data centers

Require all new data centers to operate on 100% carbon neutral energy, with offsets as needed. This requirement does not apply to data centers with planning application approval within six months of the CAP adoption date.

Implementation Considerations:

- Use offsets as needed to help ease the transition to carbon neutral energy but ensure that reducing emissions remains the main priority.

Strategy B2: Improve energy efficiency

Action B-2-1: Municipal energy retrofits

Continue to conduct comprehensive energy retrofits of existing City equipment and implementation of previously identified energy efficiency projects with a benefit-cost ratio of one or greater.

Co-benefits:

- Saves energy costs to the City and supports green job growth by providing an opportunity for local contractors to complete retrofit projects.

Action B-2-2: Free home-energy upgrades for qualifying residents

Continue to provide free home-energy audits and upgrade incentives for low-income households and affordable housing developers and property owners.

Co-benefits:

- Reduces energy costs for low-income residents and supports equity by addressing the energy-inefficient housing that has caused low-income residents to face a disproportionately high energy burden.

Implementation Considerations:

- Structure incentives in a way that benefits property owners and residents to ensure that both are incentivized to participate.

Action B-2-3: Energy-efficient and electric-ready building code

Update local building code to increase energy efficiency standards to at least CALGreen Tier 1.

Co-benefits:

- Aligns Santa Clara with aggressive new energy efficiency standards that are vital to meet emissions reduction goals.

Implementation Considerations:

- Develop outreach and facilitate resource sharing among contractors, developers, and other members of the building community to ensure they have the necessary resources to comply with energy efficiency standards.

Action B-2-4: Distributed energy resource pilots

Pilot technologies like energy storage, vehicle-to-grid charging stations, web-enabled devices, and microgrids within City facilities and with private sector partners, and evaluate their ability to reduce utility costs and carbon emissions.

Action B-2-5: Energy efficiency incentives

Partner with BayREN, SVP, and other local jurisdictions and agencies to provide and promote energy efficiency incentives and rebate programs for residents and businesses. Continue to support the City's existing affordable Multi-Family Energy Efficient Rehabilitation Grant Program.[16]

Strategy B3: Maximize renewable energy generation and storage capacity

Action B-3-1: SVP Integrated Resource Plan (IRP) for carbon-neutral electricity

Examine resource procurement and cost scenarios to provide 70% carbon neutral electricity to all customers by 2030 to meet SB-32 climate goals, and 60% renewable electricity to meet SB-100 climate goals. Explore SVP achieving 100% carbon neutral electricity by 2035.

[16] More information on this program is available at Multi-Family Energy Efficient Rehabilitation Grant Program | City of Santa Clara (santaclaraca.gov).

Implementation Considerations:

- Structure program so that transition does not lead to higher utility rates and increase the energy burden for low-income community members.

Action B-3-2: City-owned renewable energy projects

Continue to investigate the use of City-owned property for additional large-scale carbon-neutral energy and storage projects.

Co-benefits:

- Large-scale energy and storage projects have the potential to significantly reduce emissions.

Implementation Considerations:

- Capitalize on unused local real estate, such as empty parking lots, by installing solar panels and other renewable infrastructure.

Action B-3-3: Renewable installations at municipal facilities

Install solar or other on-site renewable energy projects at City-owned facilities.

Action B-3-4: Renewable energy generation & storage on private property

Expand financial assistance options to SVP customers to increase the implementation of renewable energy generation systems and energy storage infrastructure, including streamlining of project permitting and expanding the City's solar grant program.

Implementation Considerations:

- Structure program to ensure equitable access to renewable energy technology.
- Due to split incentive dilemma between landlords and tenants, focus outreach on multi-family properties.

Action B-3-5: Local grid resiliency & energy storage improvements

Accelerate improvements to the energy grid or storage as needed to transition the city to renewable energy sources. These improvements may include subsidy and grant programs for electrification in existing buildings to reduce the cost of battery storage and electric vehicle charging/storage system installations.

Action B-3-6: Alternative backup generators

Provide information and technical assistance to data centers and other large commercial users to transition from diesel to lower-carbon backup generators (e.g., renewable diesel).

Implementation Considerations:

- Consider promoting the use of non-diesel alternatives as alternative back-up power source for data centers when SVP service is unavailable.

Action B-3-7: Renewable electricity for new data centers

Support convening of a data center working group to identify and implement renewable electricity purchasing options for commercial customers.

The "Split Incentive Dilemma"

A "split incentive" occurs when neither landlord nor tenant is incentivized to pay for retrofits or upgrades to electrify buildings or reduce energy use. Split incentives typically occur for the following reasons:

- Building owners pay for upgrades, but tenants receive the benefits of lower utility bills. While this scenario is favorable to tenants, landlords are not incentivized to pay for upgrades when they do not directly realize cost benefits.
- Building owners pass the cost of the upgrades along to the tenants in the form of increased rent or other charges. However, tenants may be unable to accommodate the short-term cost increases or may not rent long enough to see the financial benefits of the upgrade.

Split incentives often result in renters—who are often low to moderate income—living in less efficient buildings with higher energy bills.[1] As a result, these residents often face a higher housing cost burden than homeowners. While this dilemma remains a complex issue to solve, Santa Clara can address it in part through targeted community outreach to both tenants and landlords. Green leases, Environmental Upgrade Assessments (EUAs), on-bill financing, and local code changes preventing landlords from passing on retrofit costs are also potential solutions.

1: The Greenlining Institute. Equitable Building Electrification.

TRANSPORTATION & LAND USE

Goal: Transition to clean and efficient mobility options and transportation modes while maintaining accessibility and mobility for all.

The State of California's Clean Car Standards requiring that vehicles sold in California meet minimum fuel efficiency requirements—and the standards set under EO-79-20 that new cars and trucks be zero emission vehicles by 2035—are expected to drive a shift to electric vehicles. This shift will reduce emissions from transportation and help the City reach net zero by 2045. Santa Clara can build upon this legislation and further reduce emissions by further promoting widespread adoption of electric vehicles, supporting telecommute/telework strategies, and improving access to biking, walking, carpooling, and public transit. Planning to create convenient, pedestrian-friendly blocks with homes, businesses, parks, and other uses mixed together can also help reduce driving, particularly if these "mixed use" areas are located near transit stops.

Transportation measures overlap and can bolster each other's success. For example, developing areas around transit stops will best lead to more public transit use if the transit system is reliable and efficient, and a City bike share program will be most effective after the City implements the Bicycle and Pedestrian Master Plans and addresses gaps in safe bicycling infrastructure.

Strategy	Estimated GHG Reductions from baseline year ($MTCO_2e$)		
	2030	2035	2045
▸ **Transition to electric vehicles** by improving our EV charging infrastructure. Actions include expanding the number of public, commercial, and residential charging stations, transitioning a portion of the municipal fleet to electric vehicles, and incentivizing businesses and industries to electrify fleets.	92,000	97,000	112,000
▸ **Expand clean mobility options and use of non-SOV transportation modes** by making Santa Clara more bike and walk friendly, improving public transit, and incentivizing low-carbon transportation. Actions include improving the city's trail network, promoting low-carbon transportation, and identifying transit gaps.	152,000	163,000	142,000
▸ **Advance sustainable land use** through policies and programs that encourage higher density development near transit centers, walkable and bikeable communities, and support telecommuting. Actions include promoting sustainable development through new building standards, incentivizing "transit-oriented" development that creates compact, walkable, mixed-use communities centered around public transit, and supporting telecommuting.	N/A	N/A	N/A

Strategy T1: Transition vehicles to electric alternatives

Action T-1-1: Community EV Blueprint implementation

Implement the EV acceleration program in SVP's EV Blueprint to achieve EV Blueprint goals. Priority actions include:

- Expanding multi-unit dwelling and low-income charging availability.
- Electrifying City fleets and installing related charging stations.
- Expand public charging availability.
- Electrify transit fleets.

Implementation Considerations:

- Consider the location of charging stations, as well as the charging level (1,2, or 3), to make sure chargers are accessible to a diverse demographic and that they can charge a range of different vehicle models.
- Consider including charging stations at local schools and universities.

Action T-1-2: EV charging for all new construction

Implement EV charging requirements as specified in the adopted 2021 Reach Codes.

Implementation Considerations:

- Sequence actions to align EV charger requirements with building electrification incentives and electric panel upgrades to ensure that buildings are equipped to handle the increased electrical demand from EVs.

Action T-1-3: City Fleet Electrification Plan implementation

Require a percentage of new standard light-duty, medium-duty, and heavy-duty City fleet to be electric vehicles (zero emission) with EV infrastructure in accordance with Executive Order N-79-20 and related CARB regulations. [17]

Action T-1-4: Heavy duty electric trucks

Partner with businesses and industries to accelerate transition of heavy-duty trucks to electric through incentives or local tax credits. Heavy-duty trucks account for a significant portion of overall transportation GHG emissions, making it a priority to streamline the electrification of these vehicles.

Action T-1-5: Municipal charging infrastructure

Expand municipal facility charging infrastructure to serve municipal fleet, employee, and public charging needs.

[17] California Air Resources Board. 2021. Governor Newsom's Zero-Emission by 2035 Executive Order.

Strategy T2: Expand clean mobility options and use of non-SOV transportation modes

Action T-2-1: Pedestrian & Bicycle Master Plans implementation

Fund and accelerate implementation of the Pedestrian Master Plan and Bicycle Master Plan—focusing on 1) closing gaps in the bicycle and pedestrian networks with a focus on high demand arterials; 2) installing painted buffers or physical vertical elements on high stress roadways documented in the Bicycle Master Plan; and 3) implementing spot improvements in high traffic areas (e.g., bicycle detection, bulb-outs, and wayfinding elements)—such that walking and biking comprise 10% of total city mode share.

Co-benefits:

- Enhances public health by encouraging active transportation.
- Promotes active transportation to and from school through initiatives focused on ensuring safe walk and bus routes to school, stationing school crossing guards nearby schools, and other programs.

Action T-2-2: Curb management improvements

Incentivize projects that optimize curbside areas for low-carbon modes and reduce VMT, such as designated rideshare parking and loading zones, scooter and bike share docks, bike parking, electric vehicle and bike charging stations, and autonomous vehicle loading zones.

Co-benefits:

- Enhances public health by encouraging active transportation.

Implementation Considerations:

- Consider the location and configuration of vehicle loading zones to mitigate potential safety risks to cyclists in nearby bike lanes.
- Consider the accessibility of curbs to people with disabilities as part of curb management improvements.

Action T-2-3: Bike & shared mobility improvements

Increase public access to bikes, including electric bikes, implementing a bikeshare program, expanded bike parking, electric bike rebates, and requiring new developments to include one secured bicycle parking spot for each multi-family residential unit. Electrical outlets shall be available in bike storage room for ebike charging. The City should look to prioritize low stress facilities to encourage increased ridership.

Co-benefits:

- Enhances public health by promoting non-motorized travel and saves costs for residents through rebates and shared mobility programs.

Implementation Considerations:

- Balance bike and shared mobility improvements with other local transportation needs to ensure that Santa Clara's future transportation systems meet the needs of a diverse demographic.
- Consider coordinating improvements with the VTA Countywide Bicycle Plan.

Action T-2-4: Transit gap & improvement study

Partner with VTA to conduct a public transit gap study to increase transit use within the city—such that transit comprises 12% of total city mode share. These studies focus on identifying gaps in transit service or transit facilities in areas where there is need or demand; the results will help VTA identify where to target public transportation infrastructure projects most effectively.

Implementation Considerations:

- Ensure that study includes a component focused on demographics and proximity to transit stops.
- Consider focusing study on both city and regional transit needs.

Strategy T3: Advance sustainable land use

Action T-3-1: TDM plan requirements

Introduce the following TDM plan requirements:

- Require a 25% reduction in project-based VMT through active TDM measures for large employers over 500 employees, including aggressive regulations to reduce parking, in new developments. For the purpose of calculating the number of employees, separate employers sharing a building or project site would be treated as one employer.
- Adopt a 20% reduction of VMT for multifamily residential with a 10% reduction through active TDM measures, which may require parking maximums, in new developments.
- Projects shall provide annual reports demonstrating compliance with VMT reduction targets, pursuant to procedures established by City staff.

Previously entitled projects that are already subject to VMT requirements and/or TDM measures would continue to follow the requirements assigned at the time of entitlement. In addition, new projects within the land use designations listed under footnote 18 on page A-8 of the Implementation Matrix in Appendix A would follow the TDM requirements set forth in that footnote.

Co-benefits:

- Foundational step for reducing VMT, which is a vital step to reduce emissions from transportation.

Action T-3-2: Sustainable development in underutilized non-residential areas

Require higher density, mixed-use development in the Specific Plan Areas, especially El Camino Real Specific Plan. These developments should include increased building heights, zoning changes to higher density mixed residential, and consider opportunities for mixed land use and/or transit-oriented development. Quantify the net benefits of specific plans.

Action T-3-3: Transit-oriented development

Introduce requirements and/or incentives to encourage transit-oriented development (TOD) near transit corridors.

Action T-3-4: Telework

Expand telecommuting options through fiber infrastructure investment and expand existing TDM programs to include telecommuting. Explore longer term municipal employee telework policies building from existing practices.

Action T-3-5: Transportation Analysis Policy compliance

Require that all projects comply with the Transportation Analysis Policy that was adopted by Council in June 2020, which establishes requirements for evaluating the transportation impacts of residential, commercial, and industrial projects.

What Happens to Old EV Batteries?

EVs release much less pollution and fewer greenhouse gas emissions overall than conventional vehicles, but they do have a problem: recycling EV batteries is difficult. Lithium-ion batteries used by EVs are made of many individual cells held together using strong glues. They contain hazardous materials and may explode if handled incorrectly. This makes recycling dangerous, polluting, and costly.[1]

Electric vehicle manufacturers delay the recycling process by giving used batteries second lives as large-scale storage systems. They have installed retired batteries as back-up power and renewable energy storage systems for arenas, convenience stores, and homes in Europe, Japan, and the United States. These strategies can extend the useful life of batteries by ten years or more. Batteries that are truly at the end of their lives may be disposed as hazardous waste or recycled via intensive processes. Lithium-ion battery recycling rates are still low (about 5% in the United States).[2] With more and more electric vehicles projected to hit the roads, battery recycling is an increasingly important issue, both to minimize waste and pollution and to guarantee a sustainable source of battery components into the future.

California has initiated the Lithium-ion Car Battery Recycling Advisory Group, which advises the state legislature on policies to address this issue.[3] Other countries are considering rules holding battery producers responsible for recycling. In the meantime, in the United States, researchers at universities, start-ups, and everywhere in between are searching for efficient recycling techniques.[2] The answer will come in the form several solutions at once: new technological innovations in battery design and recycling, supporting policies, and enough recycling facilities so that transportation costs are not too high.[1]

1: Science Magazine. 2021. A Dead Battery Dilemma.
2: New York Times. 2021. How green are electric vehicles?
3: Cal EPA. n.d. Lithium-ion Car Battery Recycling Advisory Group.

MATERIALS & CONSUMPTION

Goal: Increase diversion of waste from landfills, reduce communitywide waste generation, and reduce the upstream GHG impacts of consumption.

Waste from Santa Clara's consumption and disposal of goods and materials contributes to climate change in several ways. Waste disposed in landfills—particularly organic waste—produces potent methane. Producing and distributing new products, in turn, generates upstream emissions from the energy used to manufacture goods and transport them around the world. Santa Clara can reduce these emissions by diverting waste from landfills, promoting sustainably sourced and produced products, and supporting programs that support reuse of existing goods—especially construction materials. California state has set a goal to divert 75% of organic waste from landfills by 2025, and to reduce edible food disposal by at least 20% by 2025. Santa Clara can align with this goal and reduce waste emissions by doing the following.

Strategy
▸ **Increase waste diversion.** Actions include aligning with California's solid waste policies, promoting and expanding existing recycling and composting programs, such as the battery recycling stations located at City Hall and other public facilities, and requiring that more construction projects comply with regulations that aim to reduce construction and demolition (C&D) waste.
▸ **Reduce landfilled food waste** by preventing food waste and expanding edible food recovery and donation programs. Actions include food waste reduction education and outreach campaigns focused for top food waste producers, supporting local food recovery organizations, and joining food waste recovery and food security efforts.
▸ **Enhance sustainable production and consumption** by expanding programs that allow residents and businesses to buy less carbon-intensive goods and materials. Actions include supporting regional organizations that process and sell salvageable building materials, adopting new municipal purchasing policies that prioritize goods and materials with the lowest carbon footprint, and promoting sustainable building materials in local construction projects.

Strategy M1: Increase waste diversion

Action M-1-1: Compliance with state solid waste ordinances

Comply with state solid waste laws, including AB-1826, AB-341, and SB-1383. These bills require that businesses, public entities, and communities expand recycling and composting infrastructure to meet the state's ambitious landfill waste reduction targets. **AB-1826** requires commercial businesses that generate a certain level of organic waste arrange for recycling services for that waste. **AB-341** similarly requires that commercial businesses and public entities that generate a certain level of weekly waste have a recycling program in place. **SB-1383** requires that California reduce organic waste to landfills by 75% by 2025 and rescue 20% of surplus edible food in phases beginning in 2022.

Co-benefits:

- Significant emissions reduction benefit due to the methane emissions produced from landfill waste.
- Reduces upstream emissions from food production by diverting edible food from landfills.

Implementation Considerations:

- Consider pairing action with educational campaigns around proper waste disposal; consider integrating visuals in place of text to reach a wider audience.
- Consider partnering with neighboring communities to share resources and identify opportunities for costs savings (e.g., through contract negotiations with regional waste haulers).

Action M-1-2: Waste diversion pricing signals

Explore or promote existing incentives for recycling and composting and discouraging landfill waste. These programs provide tools and financial resources for individuals and institutions to divert waste, which collectively reduces Santa Clara's waste overall. Examples of these programs include:

- University of California Cooperative Extension Compost Education program, compost bin subsidies and compost giveaways for residents.
- Environmental Days provided by Recology, household hazardous waste drop-off events, and battery recycling stations at City Hall, Corp Yard, and Fire Stations.
- Collect used motor oil/oil filters/batteries/CFLs curbside.
- Recyclestuff.org.
- Countywide Bring Your Own Cup campaign, Reusable vs. Disposable, A La Carte, and South Bay Green Gardens.

Strategy M2: Reduce landfilled food waste

Action M-2-1: Technical assistance to top food generators

Provide education, outreach, and technical assistance to top food producers such as hotels, hospitals, corporate cafeterias, and campuses to prevent food waste, increase surplus of edible food donations, and comply with SB-1383 requirements. Options include food waste tracking software and food donation pickup services.

Co-benefits:

- Food waste in landfills is a major source of methane emissions. Partnering with food producers to reduce this waste at the source is a particularly effective strategy to reduce emissions.
- Takes pressure off of businesses who want to donate surplus edible food but lack the means to store it or implement the logistics needed for a successful program.
- Supports both public health and equity because it helps address food insecurity, which disproportionately impacts low income and minority community members.
- Reduces upstream emissions from food production by diverting edible food from landfills.

Action M-2-2: Food recovery & donation

Continue to partner with local agencies to implement an Edible Food Recovery Program as required under SB-1383. Establish an excess edible food baseline and then assist food recovery organizations in establishing pickup and redistribution.

Co-benefits:

- Potentially provides additional inventory to non-profit organizations that provide free meals but do not have enough food to expand their services, which helps reduce regional food insecurity.

Implementation Considerations:

- As part of support for recovery organizations, consider how the City can also improve access to these resources for community members who are most in need.
- Consider the nutritional quality of donated food to avoid inadvertently perpetuating existing health disparities among community members who rely on food assistance.

Action M-2-3: Food recovery organization partnerships

Participate in regional partnerships for promoting food waste reduction, recovery, and security, such as Loaves and Fishes, A La Carte, Silicon Valley Food Recovery, Second Harvest of Silicon Valley, and the Santa Clara County Food System Alliance.

Co-benefits:

- Supports both public health and equity because it helps address food insecurity, which disproportionately impacts low income and minority community members.

Implementation Considerations:

- Consider how regional collaboration can go beyond feeding those in need to also address the root causes of food insecurity so that fewer community members are dependent on hunger-relief organizations.

Strategy M3: Enhance sustainable production and consumption

Action M-3-1: Reuse of salvageable building materials

Promote organizations, such as The Reuse People, in Santa Clara County that salvage building materials. Building materials have a high amount of embodied carbon—the GHG emissions associated with producing a product. By supporting the reuse of these materials, Santa Clara can help reduce these emissions.

Action M-3-2: City property consumption & waste diversion

In all City contracts and event permits, require that all third-party vendors provide and utilize recyclable and/or reusable food service items to serve 50 or more people, and provide recycling and composting receptacles for attendees. Through this action, the City both diverts waste from landfills and shows the community its commitment to sustainability.

Implementation Considerations:

- As feasible, provide reusable cups, plates, and utensils at events and meetings or encourage event attendees to bring their own.

Action M-3-3: Municipal Sustainable Procurement Policy

Implement a municipal sustainable procurement policy to prioritize improvements for the highest emissions reduction impact purchasing decisions within each department, including vehicle and fuel purchases and low-carbon concrete. Adopting a formal policy both reduces the upstream emissions tied to producing products and shows the City's leadership on sustainability.

Implementation Considerations:

- Explore and consider the environmental sustainability related procurement practices and/or policies of City contractors and consultants.
- Explore feasibility of establishing an internal price on carbon to inform purchasing decisions.

Action M-3-4: Carbon-smart building materials

Educate architects, designers, and contractors to enable and promote carbon-sequestering and low-albedo building materials in new construction and renovations. This could include requirements for disclosing and/or limiting the embodied carbon emissions of buildings through whole-building or material specific policies. Sustainable building materials can significantly reduce emissions from construction projects; this action ensures that developers have the tools and information they need to build more sustainably.

Action M-3-5: Low-carbon schools

Partner with Santa Clara Unified School District to support low-carbon solutions. This may include working with the schools on energy efficiency and electrification, waste reduction and recycling, and sustainable purchasing. This action supports schools in reducing waste and emissions and engaging students in climate action.

Tracking Emissions on Purchased Products

To paint a more complete picture of their overall GHG emissions, communities around California and beyond are beginning to use "consumption-based" emissions inventories to estimate the emissions that are created from consumption of everyday goods and services. In future CAP updates, Santa Clara will explore expanding its current GHG inventory methodology to include these inventories to inform future climate change planning efforts and strengthen our overall approach to reducing emissions.

NATURAL SYSTEMS & WATER RESOURCES

Goal: Foster climate-resilient natural landscapes and help store more carbon in trees and soils. Conserve community water resources by maximizing water efficiency to ensure a secure and sustainable water supply in the face of climate change.

Santa Clara's natural systems are a vital tool for both climate change mitigation and building resiliency to climate impacts. Natural systems like trees, grasses, and soils, naturally capture and store carbon—making them a vital tool for reducing emissions. These systems also provide valuable resiliency benefits, such as the natural cooling from tree shade and vegetated areas that reduces impacts from extreme heat. A commitment to a healthy urban forest and nature-based solutions has additional community and neighborhood benefits, such as improved air quality, traffic calming, reduced crime, building energy savings due to shading, and increased property values. Santa Clara's water resources—vital for community wellbeing and public health—are vulnerable to climate impacts like extreme heat, less regional snowpack, and wildfires, which threaten water supply and water quality. Santa Clara's Public Park System expansion, meanwhile, is essential for providing continued biodiversity and adequate land for trees and vegetation, as well as opportunities for outdoor recreation and green spaces. We can protect these valuable resources by doing the following.

Strategy	Estimated GHG Reductions from baseline year ($MTCO_2e$)		
	2030	2035	2045
▸ **Increase tree planting and cover**. Actions include new City guidelines for replacing dying or hazardous trees, increased street tree planting, and regional collaboration on urban forests.	N/A	N/A	N/A
▸ **Enhance ecosystem resilience** by promoting more sustainable practices and other ecosystem management initiatives that optimize the carbon sequestration benefits of natural systems. Actions include partnering with regional groups on restoration projects aimed at increasing local carbon capture and developing a tree planting guide outlining best practices for tree management.	40	45	60
▸ **Improve water supply and conservation**. Actions include promoting water conservation incentive programs, expanding water efficiency retrofits and rebate programs, and diversifying the community water supply to prepare for future droughts.	3,600	3,000	-

Strategy N1: Increase tree canopy cover

Action N-1-1: Right-of-way tree planting

Promote residential street tree planting in the right-of-way (in front of the property line). Under the City's current street tree program, all planting, pruning and removal of street trees is provided to residents at no charge.

Co-benefits:

- Trees have valuable climate resiliency benefits, including improved air quality, traffic calming, reduced crime, and building energy savings due to shading. including providing cooling through natural shade
- Trees provide aesthetic appeal, increase property values, facilitate a sense of community, and are also vital for overall ecosystem health.

Implementation Considerations:

- Ensure that tree planting is administered community-wide, particularly in lower income neighborhoods that historically have had less green space.
- Consider the species and size of trees to avoid future damage to streets and sidewalks.
- Use regional heat island study data to determine where to prioritize tree planting.

Action N-1-2: Private property tree planting support

Support private property planting of trees through partnerships with organizations such as Our City Forest. Advertise services on the City website.

Co-benefits:

- Trees have valuable climate resiliency benefits, including improved air quality, and building energy savings due to shading.
- Trees provide aesthetic appeal, increase property values, facilitate a sense of community, and are also vital for overall ecosystem health and have can provide traffic calming effects and reduced crime.

Implementation Considerations:

- Consider pairing action with education and outreach campaigns that build upon past successful City tree programs to promote proper tree maintenance and highlight the value that trees bring to the community.

Action N-1-3: Urban forest partnerships

Promote healthy, well-managed urban forests by participating in the County's Urban Forest Alliance partnership.

Action N-1-4: Tree maintenance, replacement, and plantings

Update Street Tree Planting plan to develop a procedure for retiring and replacing trees (when they are dying or creating hazards), with an emphasis on species that maintain tree canopy, and prevent unintended consequences, such as sidewalk uplifts from tree root growth. Collaborate with the community on appropriate tree maintenance, replacement, and plantings as per City Tree Ordinance.

Co-benefits:

- Trees have valuable climate resiliency benefits, including improved air quality, traffic calming, reduced crime, and building energy savings due to shading. including providing cooling through natural shade
- Trees provide aesthetic appeal, increase property values, facilitate a sense of community, and are also vital for overall ecosystem health.

Carbon Sequestration Opportunities in Santa Clara

Santa Clara has an estimated 10,500 city street trees and 13 miles of creeks. This urban forest and other biomass in parks and protected natural areas represent a "stock" of sequestered carbon. It is important to maintain this valuable stock of stored carbon through the maintenance and replacement of trees and plants on an ongoing basis. While this established stock of stored carbon is not able to function as a credit in the greenhouse gas analysis, any additional trees that are planted or the restoration of riparian, estuary, or other ecosystems can be counted toward GHG reductions.

Opportunities include increasing the extent of the urban forest by planting in currently empty tree wells or replacement of dead trees in parks. Additional trees can also be planted in parks and public rights of way that have not had street trees previously in parks and in public property and rights of way. An additional 1,600 trees, or a 15% increase over current stock, would result a carbon drawn down of approximately 1,060 tons of carbon by 2045.[1]

Creek and riparian restoration is another option to increase carbon sequestration. Calabazas Creek, Saratoga Creek, and San Tomas Aquino Creek all flow through the City. These creek areas are generally in a moderately degraded ecological condition. Ecological restoration, planting of additional trees and woody shrubs, combined with ongoing maintenance, would enable additional carbon to be stored in the soil and additional biomass. Improving the ecological condition of the riparian areas in the City could result in the drawdown of an additional 1,200 tons of carbon by 2050.[2]

[1] Based on annual carbon factors from CAPCOA | [2] Based on analysis using the CREEC tool developed by the California Department of Conservation.

Strategy N2: Enhance ecosystem resilience

Action N-2-1: Carbon farming on open space lands

Partner with resource conservation districts to increase carbon farming, creek restoration, wetland restoration, and local offset opportunities in open space lands within the city limits of Santa Clara.

Co-benefits:

- Carbon sequestration fills the emissions gap left by other emission mitigation strategies, making it a vital tool for reducing emissions and improving Santa Clara's overall long-term climate resiliency.
- Supporting natural ecosystems on open space lands provides cooling and aesthetic benefits and supports species habitats.

Action N-2-2: Partnerships for compost management

Explore potential partnerships with organizations such as conservation districts to manage and utilize compost products from organics processing in compliance with SB-1383.

Action N-2-3: Sustainable planting guide

Support local organizations in developing a planting guide that prioritizes increasing available soil, carbon sequestration, resilience, and other equitably distributed co-benefits. The guide could include information on native and climate-adaptive plants, how to properly apply compost and mulch, reducing synthetic fertilizers to support soil health, how to reduce water use and store more water in the ground, and how to store carbon in soil, plants, and trees.

Action N-2-4: Sustainable park management

Utilize sustainable park management practices, including continuing to convert from gas to E-powered landscape tools and increasing recycled water use in public parks.

Strategy N3: Improve water supply and conservation

Action N-3-1: Water conservation rebates

Conduct outreach to encourage participation in Santa Clara Valley Water District's (Valley Water) water conservation rebate programs, available to single-family homes, multi-family buildings, and businesses. Expand the City's rain barrel and landscape rebate programs.

Co-benefits:

- Supports ecosystem health by conserving valuable water resources, which makes Santa Clara more resilient against future water shortages. Water conservation programs can also provide cost savings for residents by reducing water bills.

Implementation Considerations:

- Conduct tailored outreach to groups that have been historically harder to reach, such as renters and small business owners.

Action N-3-2: Fixture replacements

Expand replacement incentives, such as Santa Clara Valley Water District (Valley Water) rebate programs, of inefficient water fixtures and appliances in high-end sectors. High-end sectors include commercial, multi-family, and single-family properties.

Co-benefits:

- Supports ecosystem health by conserving valuable water resources, which makes Santa Clara more resilient against future water shortages. Replacing inefficient water fixtures can also provide cost savings for residents by reducing water bills.

Action N-3-3: Water-efficient landscaping requirements

Expand requirements for water-efficient landscaping practices, including requirements for cooling (trees, green roofs) and drought-tolerant native plants. Update the Model Water Efficient Landscape Ordinance (MWELO) to apply to landscape renovations of 1,000 square feet or larger.

Co-benefits:

- Adopting water-efficient landscaping practices today is vital for conserving future water resources.

Action N-3-4: Community water portfolio diversification

Continue collaboration with agency partners such as South Bay Water Recycling, Valley Water, BAWSCA, and SFPUC to diversify water supply portfolio and expand current sources. Diversified water portfolio towards drought resiliency could include utilizing a varying mix of surface and groundwater and requiring the increased use of recycled urban water in applicable sectors (e.g., irrigation, groundwater recharge, dual pump plumbing, cooling towers).

Co-benefits:

- Diversifying the water portfolio is a vital and foundational step for building resiliency against future water shortage from climate change.

Action N-3-5: Recycled water connection requirements

Require the use of recycled water for all non-potable uses where recycled water is available, per City Code 13.15.160. Require all new development where applicable to connect to the recycled water distribution system in order to provide recycled water for approved uses at the development site.

Co-benefits:

- Recycled water is a particularly effective way of conserving water resources and is an important foundational step for building resiliency against future water shortage from climate change.

COMMUNITY RESILIENCE & WELL-BEING

Goal: Ensure Santa Clara is prepared and can withstand climate and non-climate emergencies, focusing on those at highest risk.

Climate change poses a significant risk to the health and safety of our residents, particularly vulnerable populations, including the elderly and low-income community members. Unless we prepare today, climate impacts—including wildfires, extreme weather events, and flood events—will stress our emergency services and disrupt other vital services. In light of these threats, the Governor's Office of Planning and Research (OPR) General Plan guidance now requires that California cities and counties include specific resilience and adaptation policies in general plans. Santa Clara can align with these guidelines and build resiliency to climate impacts by doing the following.

Strategy
▸ **Improve community resilience** by expanding public programs to prepare community members for climate impacts. Actions include expanding disaster relief by developing a network of community resiliency centers—including cooling centers—where residents can go in case of a climate-related emergency. Actions also include expanding public programs that support vulnerable populations, including people experiencing homelessness, and encouraging community-led climate action and adaptation initiatives through grants and other financial incentives.
▸ **Prepare for climate change** by strengthening vital infrastructure and adopting new climate-related regulations for development and capital improvement projects. Actions include integrating natural stormwater systems into site and building designs, requiring new parking lots be paved with more sustainable materials, and identifying and potentially relocating critical facilities threatened by severe climate impacts.

Strategy C1: Improve community resilience

Action C-1-1: Community resilience networks

Support neighborhood-based organizations and businesses in development of Neighborhood Resilience Hub Programs to prepare residents and respond to climate change. Identify suitable locations for resilience hubs, cooling centers, disaster assistance and supplies. These locations will also need to develop backup power sources in the event of a power outage.

Co-benefits:

- Foundational climate resiliency step to prepare our community for natural disasters and other climate impacts.

Implementation Considerations:

- Prioritize locating resilience hubs in communities with vulnerable populations who are most susceptible to climate impacts.
- Consider developing targeted outreach campaigns to local businesses to encourage them to offer commercial spaces for resilience hubs.

Action C-1-2: Support for people experiencing homelessness

Expand support services to people experiencing homelessness during all extreme weather and hazard events (e.g., extreme heat, flooding, wildfires).

Co-benefits:

- Enhances public health by protecting community members who are most directly threatened by climate impacts, like extreme heat. It also promotes equity by expanding support to a marginalized demographic.

Implementation Considerations:

- Expand outreach on existing support services as well as developing new programs.

Action C-1-3: Community climate action grant

Establish an annual micro-grant program to support local citizen-led projects and programs that will reduce emissions, adapt to climate change, and enhance equity.

Action C-1-4: Incentives for adaptation upgrades

Offer rebates and/or other financial incentives to encourage adaptation upgrades (e.g., cool roofs, green roofs, cool pavement) and installation of low-emissions space-cooling devices (e.g., ceiling fans, heat pumps), which increase resilience cost-effectively and with a lower environmental impact.

Co-benefits:

- Has important climate resiliency impacts by making our homes and buildings operate more efficiently, which reduces strain on the energy grid. This action can also provide cost savings by lowering energy bills.
- Adaptation upgrades reduce emissions, supporting carbon reduction goals.

Implementation Considerations:

- Consider sequencing of this action with others focused on residential and commercial energy upgrades, such as energy efficiency and electrification incentives.

Strategy C2: Prepare for climate change

Action C-2-1: Climate resilient land use & development

Evaluate city land use maps to identify whether new development is being planned in high-risk areas, such as those projected to experience increased flood risk under climate project scenarios. Consider developing guidance that would require evaluation of projected flood risk for proposed projects or limit building within identified high hazard zones. Prioritize more adaptable land uses in high hazard areas, such as parks and green space.

Action C-2-2: On-site & natural stormwater systems

Integrate natural stormwater systems within site and building design to expand on-site stormwater management capacity. Natural stormwater systems reduce pollution to waterways, conserve water resources, and reduce flood risks.

Co-benefits:

- Protects public health and ecosystem health by protecting water quality.

Action C-2-3: High-albedo parking lots

As part of conditions of approval, require new parking lots to be surfaced with more sustainable pavement materials (e.g., high-albedo, permeable pavement, e-pavement, etc.) to reduce heat gain during extreme heat events, reduce energy consumption related to cooling, and reduce stormwater runoff.

Action C-2-4: Climate Resilience Capital Improvement Program (CIP)

Incorporate climate resiliency strategies and considerations in development of discretionary CIP projects, including new parks projects. Review design standards to incorporate climate resiliency considerations as appropriate.

Co-benefits:

- Foundational step for improving climate resiliency by reducing exposure of vital infrastructure to future climate impacts.

Action C-2-5: Planned retreat strategies

Identify and consider relocation opportunities for critical facilities (i.e., planned retreat for structures at risk of recurring damages). By identifying these locations, the City can proactively prepare for and reduce future impacts—saving costs and resources and reducing the threat to community members.

Co-benefits:

- Foundational step for improving climate resiliency by reducing exposure of vital infrastructure to future climate impacts.

IMPLEMENTING THE CAP

This CAP provides a coordinated and intentional strategy for the City of Santa Clara to meet its GHG emissions reduction targets while building community resilience. Making progress on these goals will require the City and community to work together and commit dedicated time and resources. The following section provides a framework for the next phase of this project—moving from planning to action.

IMPLEMENTATION SCHEDULE

Year 1 Implementation Summary

In 2022, Santa Clara will begin building upon its existing foundation for plan implementation by taking several key initial steps and implementing priority actions (refer to Appendix A: Implementation Matrix for action implementation timeframes beyond year 1). Key milestones include:

- Ensure **updates to other planning documents** that implement the CAP are consistent with the adopted plan. Designate potential **funding sources** for CAP actions and identify additional funding needs and opportunities for ongoing plan implementation. Current and potential funding sources could include City General Fund; utility revenues; federal and state grants; revolving loan funds; potential new local revenue streams; potential increased utility taxes; and public/private partnerships.
- Establish **oversight/accountability** function and identify **specific equity criteria and indicators** to consider during monitoring and evaluation of future CAP progress.
- Establish plans for internal City **resource sharing, outreach and education, and promoting incentives**. Immediate residential and commercial outreach campaigns are currently planned for promoting induction cooktops. Internal efforts are also planned for training departments on implementing reach codes.
- **Engage key stakeholders**; work closely with NGO's, non-profit organizations and other community partners to expand reach and impact of CAP actions. Continue to engage with SVP to support CAP actions related to energy.
- **Begin implementation** of the following actions:
  - ✓ Implement adopted **reach codes**.
  - ✓ Update local building code to **increase energy efficiency standards**.
  - ✓ Examine resource procurement and cost scenarios to provide **100% carbon neutral electricity to all SVP customers**.
  - ✓ Take action to **comply with state solid waste ordinances**, including AB-1826, AB-341, and SB-1383.

Synergy Between CAP Actions and Reach Codes

CAP actions focus on the adoption of reach codes, and prioritizes their implementation in Year 1, because of the synergy between these two planning efforts. All-electric building electrification and electric vehicle charging reach codes, for instance, call for all electric appliances in new construction and pre-wiring for EV charging, which supports the larger CAP goals of electrifying buildings and transitioning toward electric vehicles. In implementing the CAP and developing reach codes, the City will continue to align efforts to ensure that both initiatives support and build upon each other. Further development of reach codes will continue to focus on meeting the recommended CAP targets, and the City may update reach codes with the State Building Code cycle as needed to support GHG reduction goals.

OVERSIGHT & ACCOUNTABILITY

Options for developing an ongoing structure for oversight of CAP implementation and long-term plan updates include:

- Create an internal Sustainability and Climate Action Team (led by the City's Sustainability Manager) to assist in coordinating and implementing actions across departments, identifying synergies/collaboration opportunities, and identifying funding sources.
- Prepare annual updates for the Planning Commission and City Council on CAP progress.
- Develop and maintain a Climate Action Tracking Dashboard.

MONITORING & EVALUATION

In the first year of implementation, the City will identify staff responsible for:

- Monitoring progress toward CAP target achievement.
- Preparing annual progress reports for review and consideration by the Planning Commission and City Council.

Staff will update the City's emissions inventory every three to five years, with the next CAP update planned for 2030. These updates are also opportunities to amend the CAP as necessary, should the City find that specific measures are not achieving intended emissions reductions.

In preparation for the 2030 update and annual reporting to the Planning Commission and City Council, staff will use an Excel-based CAP monitoring and reporting tool to track Santa Clara's progress in reducing emissions, VMT, waste generation, and energy use over time. The tool is used to collect data, track GHG emissions, and assess the implementation of measures. It enables the City to sort measures based on timing, responsible department, and level of success, progress, or completion.

IMPLEMENTING INCENTIVES

Incentives are an important tool for motivating businesses and residents to voluntarily participate in climate actions, and are integrated in actions throughout the CAP. In implementing these actions, the City will focus both on promoting existing regional rebates and other incentive programs, as well as exploring options for non-financial incentives to motivate behavior change.

Existing regional incentives programs that the City will promote include the following:

- **SVP Commercial Rebates** | Silicon Valley Power offers a variety of rebates to Santa Clara businesses to incentivize energy efficiency investments. Rebates cover a range of projects, including energy efficient equipment upgrades, installation of energy management control systems, large-scale efficiency upgrades for data centers, and installation of emerging technologies that are not yet commercially available.
- **SVP Residential Rebates** | Silicon Valley Power offers Santa Clara residents free home energy audits, as well as rebates to fund recommended energy efficiency and electrification upgrades, and other products. Rebates can be applied to purchases of electric bicycles, clothes dryers, electric vehicle charging stations, and electric heat pump water heaters. The program also offers low-income residents grants for free solar panel installation and rebates for electric vehicle purchases.
- **BayRen Free Home Energy Savings Kit** | BayREN provides a free custom energy savings kit featuring energy and water efficiency products. Kits are personalized to each customer based on their home energy usage. The kit may include faucet aerators, power strips, LED light bulbs, and high efficiency showerheads.
- **BayRen Home Energy Rebates** | BayREN provides rebates for home energy upgrades to Bay Area residents living in homes built in 2016 or earlier. Each customer may receive up to $5,000 of rebates on products, including: induction cooktops, air sealing services, insulation, heat pumps, energy efficient air conditioning, tankless water heaters, and more.
- **Santa Clara Valley Water Rebate Programs** | Valley Water offers a range of water conservation rebates to fund residential and commercial water efficiency upgrades, including converting from high-water use landscaping, installing graywater laundry systems, and implementing large-scale building upgrades.

Non-financial incentives that the City will explore include the following:

- **Expedited permitting** for residential and nonresidential renewable energy generation and storage systems.
- **Develop community awards** that highlight leadership in climate resiliency and emissions reductions.

APPENDIX A: IMPLEMENTATION MATRIX

Legend:	Low	Moderate	High
Impact: ▸ How likely is the action to address plan goals and targets? ▸ Does the action address a major sustainability need?			
Cost: ▸ How must does this action cost to residents and businesses? ▸ How much does this action cost to the City of Santa Clara?	$	$ $	$ $ $
Implementation Timeframe: ▸ Ongoing – action is already underway ▸ Year 1 – action implementation in Year 1 (2022) ▸ Near-term – action implementation in 2023-2026 ▸ Mid-term – action implementation in 2027-2030 ▸ Long-term – action implementation after 2030			

Action ID	Action Description	Impact	Cost	Implementation Timeframe	Timeframe Considerations	Lead Department
Strategy B1: Shift to electric fuels in new and existing buildings to achieve net-zero carbon buildings.						
B-1-1	**Electrification incentives & financing.** Work with BayREN and other local jurisdictions and agencies to expand current financial incentives to accelerate electrification in new and existing buildings.		$	Near-term	Incentives ease transition to mandates; electrification of building sector is high priority for addressing a major emissions source.	SVP, CDD - Housing
B-1-2	**Electrification outreach for commercial & residential energy upgrades.** Continue to promote commercial and residential energy efficiency and electrification through education and outreach.		$	Ongoing	Already underway.	SVP
B-1-3	**Electric panel upgrades upon sale/turnover.** Require electric panel upgrades as needed upon sale and/or rental turnover for low-rise residential and small multifamily and commercial buildings.		$ $	Mid-term	Will require significant stakeholder engagement and buy-in as a next phase in building electrification efforts to compliment reach codes.	CDD - Building, CMO (Sustainability)
B-1-4	**Municipal Electrification Action Plan.** Work with regional energy partnerships to develop and implement an Electrification Action Plan for City facilities.		$ $	Near-term	Important to plan early to allow time for implementation; City can be a leader for the broader community.	DPW - Facilities, CMO (Sustainability)
B-1-5	**Reach codes for new construction.** Implement all-electric reach codes, with exceptions.		$ $	Year 1	All-Electric building electrification and EV Charging reach codes adopted in November 2021, Effective in 2022; start realizing benefits in new buildings right away.	CDD - Building, CMO (Sustainability)

Action ID	Action Description	Impact	Cost	Implementation Timeframe	Timeframe Considerations	Lead Department
B-1-6	**Burn out ordinance.** Prepare a "burn out" ordinance requiring that when natural gas furnaces or water heaters expire, they must be replaced with electric alternatives.	🍃🍃	$ $	Mid-term	May require some stakeholder engagement and buy-in.	CDD - Building
B-1-7	**Carbon neutral data centers.** Require all new data centers to operate on 100% carbon neutral energy, with offsets as needed.	🍃	$ $ $	Year 1	Important to establish with new data centers to start realizing benefits right away.	CDD - Planning/SVP
Strategy B2: Improve energy efficiency.						
B-2-1	**Municipal energy retrofits.** Continue to conduct comprehensive energy retrofits of existing City equipment and implementation of previously identified energy efficiency projects with a benefit-cost ratio of one or greater.	🍃	$ $ $	Ongoing	Already happening; preliminary planning and analysis already completed.	DPW - Facilities
B-2-2	**Free home-energy upgrades for qualifying residents**. Continue to provide free home-energy audits and upgrade incentives for low-income households and affordable housing developers and property owners.	🍃	$ $	Ongoing	Program already in place.	SVP
B-2-3	**Energy-efficient and electric-ready building code**. Update local building code to increase energy efficiency standards to at least CALGreen Tier 1.	🍃🍃🍃	$ $	Year 1	Reach codes already moving forward for adoption.	CDD - Building

Action ID	Action Description	Impact	Cost	Implementation Timeframe	Timeframe Considerations	Lead Department
B-2-4	**Distributed energy resource pilots.** Pilot technologies like energy storage, vehicle-to-grid charging stations, web-enabled devices and microgrids within City facilities and with private sector partners.		$ $	Near-term	Conduct pilots early on to learn from results and build out programs or infrastructure.	DPW/SVP and other departments as applicable
B-2-5	**Energy Efficiency incentives.** Partner with BayREN, SVP, and other local jurisdictions and agencies to provide and promote energy efficiency incentives and rebate programs for residents and businesses.		$	Ongoing	Many incentive programs are already in place. Next step is focused on expanding outreach to promote existing programs.	SVP, CDD - Housing
Strategy B3: Maximize renewable energy generation and storage capacity.						
B-3-1	**SVP Integrated Resource Plan (IRP) for carbon neutral electricity.** Examine resource procurement and cost scenarios to provide 70% carbon neutral electricity to all customers by 2030 to meet SB-32 climate goals, and 60% renewable electricity to meet SB-100 climate goals. Explore SVP achieving 100% carbon neutral electricity by 2035.		$ $	Year 1	SVP's upcoming IRP plan is due to Council in 2023. Critical to move this action forward to achieve targets.	SVP

Action ID	Action Description	Impact	Cost	Implementation Timeframe	Timeframe Considerations	Lead Department
B-3-2	**City-owned renewable energy projects.** Continue to investigate the use of City-owned property for additional large-scale carbon-neutral energy and storage projects.		$ $ $	Near-term	Study should come early so that there is time to inform infrastructure development. Could be considered as part of SVP's next IRP planning process; SVP transitioning to renewable energy is a key precursor to electrification benefits.	SVP
B-3-3	**Renewable installations at municipal facilities.** Install solar or other on-site renewable energy projects at City-owned facilities.		$ $	Near-term	Put in place while waiting for grid to get cleaner.	Cross departmental (e.g., SVP, DPW, Library
B-3-4	**Renewable energy generation and storage on private property.** Expand financial assistance options to SVP customers to increase the implementation of renewable energy generation systems and energy storage infrastructure.		$ $	Mid-term	Residential electricity is already carbon fee. Focus in near term is electrification rather than renewable energy generation.	SVP
B-3-5	**Local grid resiliency & energy storage improvements.** Accelerate improvements to the energy grid or storage as needed to transition to the city to renewable energy sources.		$ $	Near-term	Put in place while waiting for grid to get cleaner.	CDD - Building
B-3-6	**Alternative backup generators.** Provide information and technical assistance to data centers to transition from diesel to lower-carbon backup generators.		$ $	Mid-term	Look into availability of renewable diesel? Is supply a constraint?	CDD - Planning, SVP

Action ID	Action Description	Impact	Cost	Implementation Timeframe	Timeframe Considerations	Lead Department
B-3-7	**Renewable electricity for new data centers.** Support convening of a data center working group to identify and implement renewable electricity purchasing options for commercial customers.		$	Near-term	Planning effort—will take time to ramp up and implement; need to put into place while waiting for electricity grid to become cleaner.	SVP
Strategy T1: Transition vehicles to electric alternatives.						
T-1-1	**Community EV Blueprint Implementation**. Implement the EV acceleration program in SVP's EV Blueprint to achieve EV Blueprint goals.		$ $	Ongoing	Already underway.	SVP
T-1-2	**EV charging for all new Construction** Implement EV charging requirements as specified in the adopted 2021 Reach Codes.		$ $	Year 1	Reach codes already adopted November 16, 2021.	CDD - Building
T-1-3	**City Fleet Electrification Plan implementation.** Require a percentage of new standard light-duty, medium-duty, and heavy-duty City fleet to be electric vehicles (zero emission) with EV infrastructure in accordance with state requirements.		$ $	Near-term	City lead by example.	DPW – Fleet Services
T-1-4	**Heavy duty electric trucks.** Partner with businesses and industries to accelerate transition of heavy-duty trucks to electric through incentives or local tax credits.		$ $	Mid-term	Technology is still being developed; wait until statewide policy/incentives may be available.	CMO

Action ID	Action Description	Impact	Cost	Implementation Timeframe	Timeframe Considerations	Lead Department
T-1-5	**Municipal charging infrastructure.** Expand municipal facility charging infrastructure to serve municipal fleet, employee, and public charging needs.		$ $ $	Near-term	City lead by example.	DPW
Strategy T2: Expand clean mobility options and use of non-SOV transportation modes.						
T-2-1	**Pedestrian & Bicycle Master Plans.** Fund and accelerate implementation of the Pedestrian Master Plan and Bicycle Master Plan.		$ $ $	Near-Term	Plans have already been developed; high priority for the community.	DPW - Traffic
T-2-2	**Curb management improvements.** Incentivize projects that optimize curbside areas for low-carbon modes and reduce VMT.		$ $	Mid-term	High priority for Council; City has more control; incentive carrots before sticks; develops infrastructure that supports future actions.	DPW - Traffic
T-2-3	**Bike and shared mobility improvements.** Increase public access to bikes, including electric bikes, through bikeshare programs and improved bike infrastructure.		$ $	Near-term	High priority from community; ties into Bike/Ped Plan implementation.	DPW-Traffic
T-2-4	**Transit gap & improvement study.** Partner with VTA to conduct a public transit gap study to increase transit use within the City.		$ $	Long-term	Action informs future strategies/ infrastructure.	DPW-Traffic

Action ID	Action Description	Impact	Cost	Implementation Timeframe	Timeframe Considerations	Lead Department
Strategy T3: Advance sustainable land use.						
T-3-1	**TDM plan requirements:** • Require a 25% reduction in project-based VMT through active TDM measures for large employers over 500 employees, including aggressive regulations to reduce parking, in new developments. For the purpose of calculating the number of employees, separate employers sharing a building or project site would be treated as one employer. • Adopt a 20% reduction of VMT for multifamily residential with a 10% reduction through active TDM measures, which may require parking maximums, in new developments. Previously entitled projects that are already subject to VMT requirements and/or TDM measures would continue to follow the requirements assigned at the time of entitlement. In addition, new projects within the land use designations listed under footnote 18 below would follow the TDM requirements set forth in that footnote. [18]		$ $	Near-term	A Council priority.	CDD - Planning

Action ID	Action Description	Impact	Cost	Implementation Timeframe	Timeframe Considerations	Lead Department
T-3-2	**Sustainable development in underutilized non-residential areas**. Require higher density, mixed-use development in the Specific Plan Areas, especially El Camino Real Specific Plan.		$ $ $	Mid-term	Foundation of the City's Housing Element.	CDD - Planning

[18] For Action T-3-1, previously entitled projects that are already subject to VMT requirements and/or TDM measures would continue to follow the requirements assigned at the time of entitlement. In addition, projects in the following General Plan land use designations would be required to reduce project-based VMT through TDM requirements at the following percentages:

Land Use Designation	Minimum % VMT reduction from TDM
Santa Clara Station Very High Density Residential	Pre-BART[i]: 10% Post-BART: 20%
Urban Center/Entertainment[ii]	Office: 4% Residential: 2%
Transit Neighborhood	10%
Land Use Designations Within the Patrick Henry Drive Specific Plan Area: Very High Density Residential[iii]; Village Residential; Urban Village Residential; Urban Center Residential; and High Density Flex	10%

i. *Per Council Resolution 19-8734, the VMT reduction per project from TDM for the Santa Clara Station Very High Density Residential designation shall be 10% prior to the Santa Clara BART station becoming operational, and 20% subsequent to the Santa Clara BART station becoming operational.*

ii. *For the Urban Center / Entertainment District, the VMT reduction requirements apply to the office and residential uses within that district, and the reduction requirements are specific to those two categories of uses.*

iii. *Projects with a Very High Density Residential designation outside of the Patrick Henry Drive Specific Plan Area shall comply with the reduction requirements set forth in Action T-3-1.*

Action ID	Action Description	Impact	Cost	Implementation Timeframe	Timeframe Considerations	Lead Department
T-3-3	**Transit-oriented development**. Introduce requirements and/or incentives to encourage transit-oriented development (TOD) near transit corridors.		$ $	Near-term	Puts in place important infrastructure; development is a direct lever that the City has to influence change; requires planning to determine what the requirements and/or incentives will include.	CDD - Planning
T-3-4	**Telework**. Expand telecommuting options through fiber infrastructure investment and expand existing TDM programs to include telecommuting.		$	Near-term	High impact action and telework becoming increasingly common—prioritize implementation.	CMO, SVP, DPW
T-3-5	**Transportation Analysis Policy compliance.** Require that all projects comply with the Transportation Analysis Policy that was adopted by Council in June 2020, which establishes requirements for evaluating the transportation impacts of residential, commercial, and industrial projects.		$	Year 1	Ordinances have been enacted and require immediate compliance.	CDD - Planning
Strategy M1: Increase waste diversion.						
M-1-1	**Compliance with state solid waste ordinances**. Comply with state solid waste laws, including AB-1826, AB-341, and SB-1383.		$	Year 1	Ordinances have been enacted and require immediate compliance.	DPW - Streets

Action ID	Action Description	Impact	Cost	Implementation Timeframe	Timeframe Considerations	Lead Department
M-1-2	**Waste diversion pricing signals**. Explore or promote existing incentives for recycling and composting and discouraging landfill waste.		$	Ongoing	Incentives already underway.	DPW - Streets
Strategy M2: Reduce landfilled food waste.						
M-2-1	**Technical assistance to top food generators**. Provide education, outreach, and technical assistance to top food producers to prevent food waste, increase surplus of edible food donations, and comply with SB-1383 requirements.		$ $	Near-term	Supports compliance with existing ordinance; education and outreach support long-term behavior change.	DPW - Streets
M-2-2	**Food recovery & donation**. Continue to partner with local agencies to implement an Edible Food Recovery Program as required under SB-1383.		$ $	Near-term	Need to reduce organic disposal 75% by 2025 (based on 2014 levels).	DPW - Streets
M-2-3	**Food recovery organization partnerships**. Participate in regional partnerships for promoting food waste reduction, recovery, and security.		$ $	Mid-term	Ongoing initiative with no vital start date—other actions take priority. Action is focused on regional partnerships, so Santa Clara has less control over process/outcomes.	DPW - Streets

Action ID	Action Description	Impact	Cost	Implementation Timeframe	Timeframe Considerations	Lead Department
Strategy M3: Enhance sustainable production and consumption.						
M-3-1	**Reuse of salvageable building materials**. Promote organizations, such as The Reuse People, in Santa Clara County that salvage building materials.		$	Mid-term	(By weight) large source of waste stream; however, typically does not contain organics; low or no emissions associated with building materials. Helps achieve diversion goals but low impact on emissions.	CDD-Building
M-3-2	**City property consumption & waste diversion**. In all City contracts and event permits, require that all third-party vendors provide and utilize recyclable and/or reusable food service items to serve 50 or more people, and provide recycling and composting receptacles for attendees.		$	Mid-term	Shows City leadership, but lower impact on total emissions.	Finance/CMO - Sustainability
M-3-3	**Municipal Sustainable Procurement Policy**. Implement a municipal sustainable procurement policy to prioritize improvements for the highest emissions reduction impact purchasing decisions within each department, including vehicle and fuel purchases and low-carbon concrete.		$	Mid-term	Demonstrates the City's commitment/leadership. Will take time to develop and approve policy.	Finance/CMO - Sustainability
M-3-4	**Carbon-smart building materials**. Educate architects, designers, and contractors to enable and promote carbon-sequestering and low-albedo building materials in new construction and renovations.		$ $	Long-term	Ongoing future initiative, does not require immediate start date; other initiatives take priority.	CMO - Sustainability

Action ID	Action Description	Impact	Cost	Implementation Timeframe	Timeframe Considerations	Lead Department
M-3-5	**Low-carbon schools**. Partner with Santa Clara Unified School District to support low-carbon solutions.		$	Long-term	May take some ramp up time; likely to have relatively low impact; prioritize more impactful near-term options.	SVP
Strategy N1: Increase tree plantings and canopy cover.						
N-1-1	**Right-of-way tree planting.** Promote residential street tree planting in the right-of-way.		$ $	Near-term	Not immediate priority for reducing emissions; could start with outreach then build up to requirement.	DPW - Streets
N-1-2	**Private property tree planting support.** Support private property planting of trees through partnerships with organizations such as Our City Forest.		$ $	Mid-term	Not immediate priority for reducing emissions; current programs already happening. Could build upon/scale in the future.	DPW – Streets/CDD
N-1-3	**Urban forest partnerships.** Promote healthy, well-managed urban forests by participating in the County's Urban Forest Alliance partnership.		$	Year 1	Not immediate priority for reducing emissions; relatively easily to facilitate so may warrant near-term implementation.	DPW – Streets/CMO Sustainability
N-1-4	**Tree maintenance, replacement, & plantings.** Update Street Tree Planting plan to develop a procedure for retiring and replacing trees.		$ $	Mid-term	Not immediate priority for reducing emissions; co-benefits (increased sidewalk accessibility; aesthetics) could warrant doing in mid-term vs long-term.	DPW - Streets

Action ID	Action Description	Impact	Cost	Implementation Timeframe	Timeframe Considerations	Lead Department
Strategy N2: Enhance ecosystem resilience.						
N-2-1	**Carbon farming on open space lands.** Partner with resource conservation districts to increase carbon farming, creek restoration, wetland restoration, and local offset opportunities in open space lands within the city limits of Santa Clara.		$ $	Long-term	Carbon sequestration lower priority (prioritize emissions reduction).	DPW – Streets/CMO Sustainability
N-2-2	**Partnerships for compost management.** Explore potential partnerships with organizations such as conservation districts to manage and utilize compost products from organics processing in compliance with SB-1383.		$	Near-term	Supports compliance with SB1383 (requirements by 2025).	DPW - Streets
N-2-3	**Sustainable planting guide.** Support local organizations in developing a planting guide that prioritizes increasing available soil, carbon sequestration, resilience, and other equitably distributed co-benefits.		$	Long-term	Carbon sequestration lower priority (prioritize emissions reduction). Outcomes uncertain.	DPW - Streets
N-2-4	**Sustainable park management**. Utilize sustainable park management practices, including continuing to convert from gas to E-powered landscape tools and increasing recycled water use in public parks.		$ $	Near-term	City lead by example; some initiatives already underway.	Parks & Recreation

Action ID	Action Description	Impact	Cost	Implementation Timeframe	Timeframe Considerations	Lead Department
Strategy N3: Improve water supply and conservation.						
N-3-1	**Water conservation rebates.** Conduct outreach to encourage participation in Santa Clara Valley Water District's (Valley Water) water conservation rebate programs, available to single-family homes, multi-family buildings, and businesses. Expand the City's rain barrel and landscape rebate programs.		$ $	Mid-term	Water conservation not immediate priority for reducing emissions; program already exists, can expand upon gradually.	Water Department
N-3-2	**Fixture replacements.** Expand replacement incentives, such as Santa Clara Valley Water District (Valley Water) rebate programs, of inefficient water fixtures and appliances in high-end sectors.		$	Mid-term	Water conservation not immediate priority for reducing emissions; program already exists, can expand upon gradually.	Water Department
N-3-3	**Water-efficient landscaping requirements.** Expand requirements for water-efficient landscaping practices, including requirements for cooling (trees, green roofs) and drought-tolerant native plants.		$ $	Mid-term	Not immediate priority for reducing emissions but will help city become more resilient; could start with outreach then elevate to requirements.	Water Department / CDD - Planning
N-3-4	**Community water portfolio diversification.** Continue collaboration with agency partners such as South Bay Water Recycling, Valley Water, BAWSCA, and SFPUC to diversify water supply portfolio and expand current sources.		$ $	Ongoing	Collaborative partnerships already in place—can continue to build and expand over time.	Water Department

Action ID	Action Description	Impact	Cost	Implementation Timeframe	Timeframe Considerations	Lead Department
N-3-5	**Recycled water connection requirements.** Require the use of recycled water for all non-potable uses where recycled water is available, per City Code 13.15.160.		$ $	Mid-term	Not immediate priority for reducing emissions; currently limited availability to connect to system. Could wait to expand until infrastructure is ready.	Water Department
Strategy C1: Improve community resilience.						
C-1-1	**Community resilience networks.** Support neighborhood-based organizations and businesses in development of Neighborhood Resilience Hub Programs to prepare residents and respond to climate change.		$ $ $	Long-term	Outcomes uncertain; led by outside organizations; action addresses longer term adaptation and resiliency needs; other actions take priority.	CMO - Sustainability
C-1-2	**Support for people experiencing homelessness.** Expand support services to people experiencing homelessness during all extreme weather and hazard events (e.g., extreme heat, flooding, wildfires).		$ $	Near-term	Climate impacts pose an immediate threat to these community members.	CDD - Housing
C-1-3	**Community climate action grant.** Establish an annual micro-grant program to support local citizen-led projects and programs that will reduce emissions, adapt to climate change, and enhance equity.		$	Long-term	Ongoing initiative with no vital start date; other actions take priority.	CMO - Sustainability

Action ID	Action Description	Impact	Cost	Implementation Timeframe	Timeframe Considerations	Lead Department
C-1-4	**Incentives for adaptation upgrades.** Offer rebates and/or other financial incentives to encourage adaptation upgrades and installation of low-emissions space-cooling devices.		$	Near-term	Incentives ease transition to future mandates; short-term emissions reduction opportunity.	CDD - Building
Strategy C2: Prepare for climate change.						
C-2-1	**Climate resilient land use & development**. Evaluate city land use maps to identify whether new development is being planned in high-risk areas, such as those projected to experience increased flood risk under climate project scenarios.		$ $	Near-term	Proactive risk mitigation less costly and more effective than reactive; important to enact immediately to reduce future infrastructure damage from climate impacts.	CDD - Building
C-2-2	**On-site & natural stormwater systems.** Integrate natural stormwater systems within site and building design to expand on-site stormwater management capacity.		$ $ $	Mid-term	Longer term infrastructure investment—other actions take priority.	DPW
C-2-3	**High-albedo parking lots.** As part of conditions of approval, require new parking lots to be surfaced with more sustainable pavement materials to reduce heat gain, energy consumption, and stormwater runoff.		$ $	Mid-term	Incentives before mandates; action may face opposition and require stakeholder engagement get buy-in.	CDD - Planning

Action ID	Action Description	Impact	Cost	Implementation Timeframe	Timeframe Considerations	Lead Department
C-2-4	**Climate Resilience Capital Improvement Program (CIP).** Incorporate climate resiliency strategies and considerations in development of discretionary CIP projects, including new parks projects.		$ $	Near-term	Proactive risk mitigation less costly and more effective than reactive; important to enact immediately to reduce future infrastructure damage from climate impacts.	DPW - Engineering
C-2-6	**Planned retreat strategies.** Identify and consider relocation opportunities for critical facilities.		$ $	Long-term	Planning effort—will take time to implement; important to identify at-risk infrastructure immediately to plan for future relocation projects.	CMO- Sustainability

APPENDIX B: CEQA ADDENDUM

Initial Study/Addendum

Santa Clara Climate Action Plan 2022 Update

Prepared by

CITY OF SANTA CLARA CALIFORNIA
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THE MISSION CITY

In Consultation with

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ENVIRONMENTAL CONSULTANTS & PLANNERS

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SECTION 1.0 INTRODUCTION AND PURPOSE

1.1 PURPOSE OF THE ADDENDUM

The City of Santa Clara, as the Lead Agency, has prepared this Addendum to the 2010-2035 General Plan Integrated Final Environmental Impact Report (General Plan FEIR) for the proposed 2021 Climate Action Plan (CAP) that addresses climate change, and is intended to reduce greenhouse gas (GHG) emissions and build resiliency. The purpose of the Addendum is to analyze potential environmental impacts that would result from changes to the project description since certification and adoption of the FEIR by the City of Santa Clara in November 2010.

The California Environmental Quality Act (CEQA) Guidelines, Sections 15162 and 15164, provide that an addendum to a previously certified EIR can be prepared for a project if the criteria and conditions summarized below are satisfied:

- No Substantial Project Changes: There are no substantial changes proposed in the project which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects.
- No Substantial Changes in Circumstances: Substantial changes have not occurred with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects.
- No Substantial New Information: There is no new information of substantial importance which was not known or could not have been known at the time of the previous EIR that shows any of the following:

    a) The project will have one or more significant effects not discussed in the previous EIR;
    b) Significant effects previously examined will be substantially more severe than shown in the previous EIR;
    c) Mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternatives; or
    d) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative

The proposed project as revised, and as described in this Addendum, does not create any of the conditions described in Section 15162 of the CEQA Guidelines that call for the preparation of a subsequent EIR. No new significant impacts would occur, and no previously examined significant effects would be substantially more severe than shown in the EIR. Thus, an addendum to the adopted EIR is the appropriate environmental documentation to analyze the potential environmental impacts that would result from the refinement to the project description.

1.1.1 2010-2035 General Plan

In October 2010, the City of Santa Clara approved the 2010-2035 General Plan and certified the Plan FEIR (Resolution No. 10-7797) which is a long-range program for future growth of the City. The General Plan FEIR is a broad range analysis of the planned growth and did not analyze specific development projects. The intent was for the General Plan FEIR to provide program-level documentation from which subsequent development consistent with the General Plan could tier. The General Plan FEIR also identified mitigation measures and adopted a statement of overriding considerations for significant unavoidable impacts to public utilities, biological resources, air quality, transportation and traffic, noise, and climate change, as well as cumulative land use, population and housing, and transportation and traffic impacts resulting from build out of the General Plan.

An Initial Study and Negative Declaration was prepared in December 2013, which updated the climate change discussion from the General Plan FEIR and determined that no new impacts would occur related to implementation of the 2013 CAP. For this reason, and those described above, the General Plan FEIR continues to be an accurate evaluation of program-level impacts for the proposed 2022 CAP.

This Addendum has been prepared as part of the supplemental environmental review process needed to evaluate the proposed project in terms of the overall development and policies envisioned in the General Plan FEIR.

1.2 NOTICE OF DETERMINATION

If the project is approved, the City will file a Notice of Determination (NOD), which will be available for public inspection and posted within 24 hours of receipt at the County Clerk's Office for 30 days. The filing of the NOD starts a 30-day statute of limitations on court challenges to the approval under CEQA (CEQA Guidelines Section 15075(g)).

SECTION 2.0 PROJECT INFORMATION

2.1 PROJECT TITLE

The Santa Clara Climate Action Plan 2022 Update

2.2 LEAD AGENCY CONTACT

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City of Santa Clara
Community Development Department, Planning Division
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(408) 615-2450

SECTION 3.0 PROJECT DESCRIPTION

3.1 DESCRIPTION OF THE PROJECT ANALYZED IN THE 2010 FEIR

The City of Santa Clara adopted the 2010-2035 General Plan on November 16, 2010. In December 2013, the City Council adopted the City's current CAP as Appendix 8.13 to the General Plan and approved an Initial Study and Negative Declaration. The CAP detailed how the City would comply with state mandated GHG emission reductions targets by 2020 under Assembly Bill (AB) 32.

3.1.1 Climate Action Plan

The 2013 CAP established a GHG reduction goal of 15 percent below 2008 levels by 2020 and included measures designed to achieve this reduction.[1] The following represents a summary of the measures proposed in the 2013 CAP.

- **Coal Free & Large Renewables.** A key component of the 2013 CAP was achieving 33 percent Renewables Portfolio Standards and removing GHG-intensive sources of electricity, such as coal, from the energy portfolio of Silicon Valley Power (SVP).
- **Energy Efficiency Programs.** SVP has established annual energy efficiency targets for 2013 – 2021 and these targets are updated every three years. The 2013 CAP demonstrates emissions reduction benefits of SVP achieving the established energy efficiency targets and offers examples of effective programs that can achieve the targets.
- **Other Measures.** Other measures identified in the 2013 CAP address emissions from the transportation, solid waste, water, and off-road equipment sectors.

According to the 2013 CAP, implementation of these measures would reduce emissions by 465,610 metric tons of carbon dioxide equivalent ($MTCO_2e$), or 23 percent below 2008 baseline levels,[2] resulting in citywide emissions of 1,420,200 $MTCO_2e$ in 2020. As shown in Table 3.1-1, the City's latest GHG inventory (2016) emissions estimates were 1,790,833 $MTCO_2e$ in 2016. Based on an adjusted business-as-usual projection of 2016 emissions, 2020 emissions were estimated to be 1,703,528 $MTCO_2e$.

Table 3.1-1: Current 2013 CAP Target Metrics for 2020

2013 CAP Reduction Target (Percent)	15 Percent below 2008 levels
2013 CAP Mass Emissions Target	1,576,155 $MTCO_2e$
Latest GHG Inventory (2016)	1,790,833 $MTCO_2e$
Projected Emissions (2020) [3]	1,703,528 MTCO2e
Note: Mass Emission Target refers to the actual emissions needed to achieve 15 percent below 2008 levels.	

[1] A GHG emission reduction of 15 percent below 2008 levels was assumed to be equivalent to 1990 emissions levels. Source: ICLEI. *Quick Start Guide to Setting GHG Reduction Targets.* 2010.
[2] The City's 2008 GHG inventory showed emissions to be 2,037,800 $MTCO_2e$ in that year. Source: City of Santa Clara. Climate Action Plan. 20013.
[3] Considers emission reductions from state-level policy; does not include potential GHG emission reductions from local climate action.

As shown in Table 3.1-1 above, The City did not achieve its goal of 23 percent reduction below 2008 baseline levels in 2020.

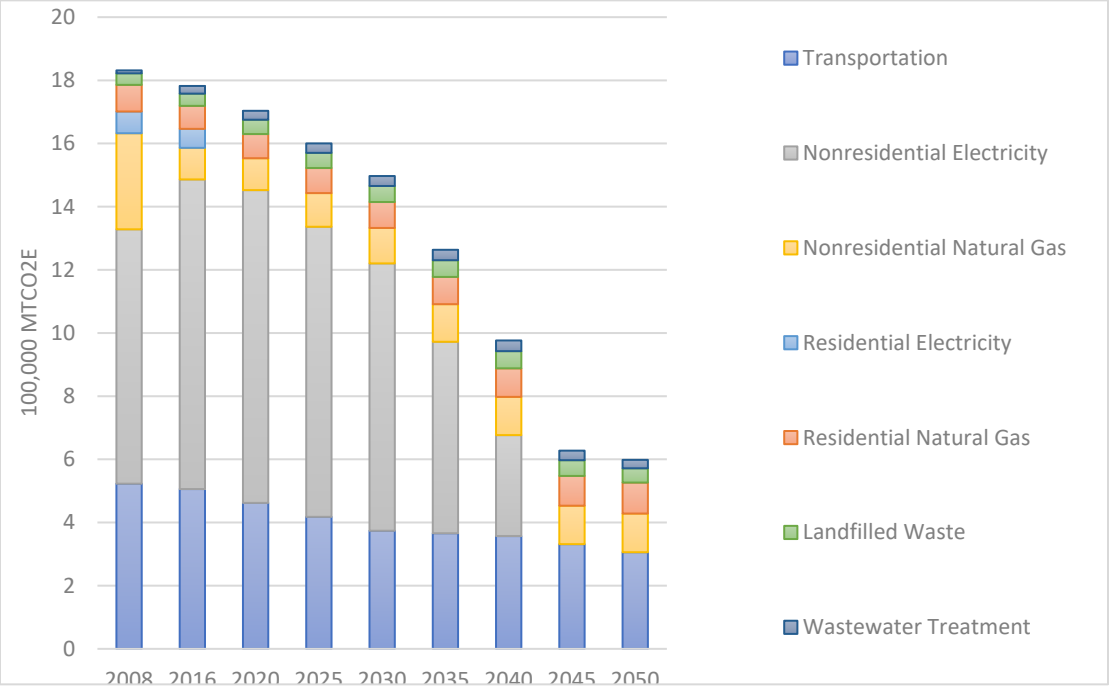
3.2 DESCRIPTION OF THE PROPOSED PROJECT

3.2.1 Progress Toward 2030 Goal

A GHG inventory was conducted using 2016 data to establish a benchmark year from which to further develop emissions' forecasts and targets through 2030. Based on current guidance from the Air Resources Board and the Governor's Office of Planning and Research, the City has set a target of 950,040 $MTCO_2e$ by 2030. This 2030 target is a state-mandated goal under SB 32 which requires a 40 percent reduction from the 1990 levels to ensure that the state meets its long-term goal of reductions equal to 80 percent below 1990 levels by the year 2050.

An updated emissions analysis estimates that citywide mass emissions were 1,583,400 $MTCO_2e$ in 1990. Figure 3.2-1 shows Santa Clara's two most recent GHG inventories (2008 and 2016) and projected GHG emissions through 2050, without implementation of the proposed 2022 CAP.

Figure 3.2-1: Citywide Greenhouse Gas Emissions Forecast



Source: Cascadia Consulting, 2022 CAP

As shown in Figure 3.2-1, under an adjusted business-as-usual scenario, citywide emissions in 2030 would be 1,497,040 MTCO2e. Thus, in order to achieve a 40 percent reduction from 1990 emission levels, the City would be required to decrease emissions by 550,553 MTCO2e.[4] Based on the

[4] 2030 business as usual emissions 1,497,040 minus 2030 target emissions 945,693 = 551,347 required emissions reduction.

forecasted GHG emissions levels above, the City has developed the following measures to achieve the 2030 GHG emissions target.

3.2.2 Proposed 2022 Climate Action Plan

The 2022 CAP (proposed project) establishes GHG reduction targets and proposed measures designed to reduce the City's GHG emissions levels by 40 percent below 1990 levels by the year 2030 in accordance with SB 32 and sets aspirational goals for emissions reductions in 2035 and 2045. Several GHG reduction measures included in the proposed project are derived from adopted policy documents that are being implemented citywide. Although the 2022 CAP addresses GHG emissions from new construction, it would also require emissions reductions from the current built environment. The following list provides a summary of the GHG reduction measures proposed in the 2022 CAP.

B1. Shift to electric fuels in new and existing buildings to achieve net-zero carbon buildings. Decarbonizing buildings by transitioning away from natural gas to electricity.

Implementation Actions

- Electrification incentives and financing
- Electrification outreach for commercial and residential energy upgrades
- Electric panel upgrades upon sale/turnover
- Municipal Electrification Action Plan
- Reach Codes[5] for new construction
- Burnout Ordinance[6]
- Carbon neutral data centers

B2. Improve energy efficiency. Reduce energy consumption by using our energy more efficiently through retrofits to our homes and buildings.

Implementation measures

- Municipal energy retrofits
- Free home-energy upgrades for qualifying residents
- Energy-efficient and electric-ready building codes
- Distributed energy resource pilot programs such as energy storage, vehicle-to-grid charging stations, web-enabled devices and microgrids within City facilities
- Energy efficiency incentives

B3. Maximize renewable energy generation and storage capacity. Shift to clean, renewable energy sources.

[5] Reach Codes are local building energy codes that "reach" beyond the state minimum requirements for energy use in building design and construction. Source: City of Santa Clara. "City News, Building Electrification and Electric Vehicle Reach Codes." December 23, 20219. https://www.santaclaraca.gov/Home/Components/News/News/39775/

[6] Burnout ordinances require that homeowners replace gas furnaces with electric heat pumps when the gas furnace burns out or stops working.

Implementation Actions

- SVP Integrated Resource Plan for renewable electricity
- City-owned renewable energy projects
- Renewable installations at municipal facilities
- Renewable energy generation and storage on private property
- Local grid resilience and energy storage improvements
- Alternative fuel backup generators
- Renewable electricity for new data centers

T1: Transition vehicles to electric alternatives by improving our electric vehicle (EV) charging infrastructure.

Implementation Actions

- Community EV Blueprint implementation[7]
- EV charging for new multi-family developments
- EV charging at single-family and two-family dwellings, townhomes, hotels/motels, offices, & other non-residential developments
- City Fleet Electrification Plan implementation
- Heavy duty electric trucks[8]
- Municipal charging infrastructure

T2: Expand clean mobility options and use of non-single occupancy vehicle transportation modes. Reduce the number of daily miles traveled by single occupancy vehicles by making Santa Clara more bike and pedestrian friendly, improving public transit, and incentivizing low-carbon transportation.

Implementation Actions

- Pedestrian and Bicycle Master Plan implementation
- Curb management improvements[9]
- Bike and shared mobility improvements
- Transit gap and improvement study

[7] The EV Blueprint is a program to accelerate transportation electrification and reduce greenhouse gas emissions from transportation in the City of Santa Clara. Source: California Energy Commission. *Clean Transportation Program Final Project Report EV Ready Communities Challenge, Phase I EV Blueprint.* June 2019. https://www.siliconvalleypower.com/home/showpublisheddocument/64525/636972441204370000

[8] This implementation action involves partnering with businesses and industries to accelerate the transition of heavy-duty trucks to electric through incentives or local tax credits. Source: City of Santa Clara. 2022 Climate Action Plan.

[9] Incentivize projects that optimize curbside areas for low-carbon modes and reduce VMT, such as designated rideshare parking and loading zones, scooter and bike share docs, bike parking, electric vehicle and bike charging stations, and autonomous vehicle loading zones. Source: City of Santa Clara. 2022 Climate Action Plan.

T3: Advance sustainable land uses. Enact more sustainable city planning policies and programs that encourage higher density development near transit centers, walkable and bikeable communities, and support telecommuting.

Implementation Actions

- Transportation Demand Management (TDM) plan requirements
- Sustainable development in underutilized non-residential areas
- Transit-oriented development
- Telework
- Transportation Analysis Policy Compliance

M1: Increase waste diversion programs.

Implementation Actions

- Compliance with state solid waste ordinance
- Waste diversion pricing signals

M2: Reduce landfilled food waste.

Implementation Actions

- Technical assistance to top food generators
- Food recovery and donation
- Food recovery and organization partnerships

M3: Enhance sustainable production and consumption.

Implementation Actions

- Reuse salvageable building materials
- City property consumption and waste diversion
- Municipal Sustainable Procurement Policy
- Carbon-smart building materials
- Low-carbon schools

N1: Increase tree canopy cover by planting more trees.

Implementation Actions

- Right-of-way tree planting
- Support private property trees
- Urban forest partnerships
- Tree maintenance, replacement and plantings

N2: Enhance ecosystem resilience.

Implementation Actions

- Carbon farming on open space land[10]
- Partnerships for compost management
- Sustainable planting guide
- Sustainable park management

N3: Improve water supply and conservation.

Implementation Actions

- Water conservation rebates
- Fixture replacements
- Water-efficient landscape requirements
- Community water portfolio diversification
- Recycled water connection requirements

C1: Improve community resilience.

Implementation Actions

- Community resilience network
- Support for people experiencing homelessness
- Community climate action grant
- Incentives for adaptation upgrades

Strategy C2- Prepare for climate change.

Implementation Actions

- Climate-resilient land use & development
- On-site and natural stormwater systems
- High-albedo parking lots
- Climate Resilience Capital Improvements Program (CIP)
- Planned retreat strategies

[10] Carbon farming refers to the act of using farming practices that are known to improve the rate at which carbon dioxide is removed from the atmosphere and converted to plant material and/or soil organic matter. Source: California Association of Resource Conservation Districts. "Carbon Farming." September 14, 2021. https://carcd.org/our-work/project/carbon-farming/

SECTION 4.0 ENVIRONMENTAL SETTING, CHECKLIST, AND IMPACT DISCUSSION

This section presents the discussion of impacts related to the following environmental subjects in their respective subsections:

4.1	Aesthetics	4.12	Mineral Resources
4.2	Agriculture and Forestry Resources	4.13	Noise
4.3	Air Quality	4.14	Population and Housing
4.4	Biological Resources	4.15	Public Services
4.5	Cultural Resources	4.16	Recreation
4.6	Energy	4.17	Transportation
4.7	Geology and Soils	4.18	Tribal Cultural Resources
4.8	Greenhouse Gas Emissions	4.19	Utilities and Service Systems
4.9	Hazards and Hazardous Materials	4.20	Wildfire
4.10	Hydrology and Water Quality	4.21	Mandatory Findings of Significance
4.11	Land Use and Planning		

The discussion for each environmental subject includes the following subsections:

- **Environmental Setting** – This subsection 1) provides a brief overview of relevant plans, policies, and regulations that compose the regulatory framework for the project and 2) describes the existing, physical environmental conditions at the project site and in the surrounding area, as relevant.
- **Impact Discussion** – This subsection 1) includes the recommended checklist questions from Appendix G of the CEQA Guidelines to assess impacts and 2) discusses the project's impact on the environmental subject as related to the checklist questions, and compares the impact to the 2010 EIR, as updated by the 2013 Negative Declaration.

4.1 AESTHETICS

4.1.1 Environmental Setting

4.1.1.1 *Regulatory Framework*

Although adopted prior to the 2013 CAP, Senate Bill (SB) 743 came into effect after adoption of the 2013 CAP and therefore, represents a change in the regulatory framework for aesthetics conditions since adoption of the 2013 CAP. SB 743 was adopted in September 2013 and requires lead agencies to use alternatives to level of service (LOS) for evaluating transportation impacts, specifically vehicle miles traveled (VMT). SB 743 also included changes to CEQA that apply to transit-oriented developments, as related to aesthetics and parking impacts. Under SB 743, a project's aesthetics impacts will no longer be considered significant impact on the environment if:

- The project is a residential, mixed-use residential, or employment center project, and
- The project is located on an infill site within a transit priority area

SB 743 also clarifies that local governments retain their ability to regulate a project's aesthetics impacts outside of the CEQA process.

4.1.1.2 *Existing Conditions*

Numerous development projects have been approved and constructed since adoption of the 2013 CAP which has visually changed the built environment in Santa Clara. These development projects were required to undergo environmental review and comply with City policies and design standards.

4.1.2 Impact Discussion

	New Potentially Significant Impact	New Less than Significant with Mitigation Incorporated	New Less than Significant Impact	Same Impact as Approved Project	Less Impact than Approved Project
Except as provided in Public Resources Code Section 21099, would the project:					
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒	☐

	New Potentially Significant Impact	New Less than Significant with Mitigation Incorporated	New Less than Significant Impact	Same Impact as Approved Project	Less Impact than Approved Project
Except as provided in Public Resources Code Section 21099, would the project:					
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings?[11] If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒	☐

4.1.2.1 *Response*

According to the General Plan FEIR, there are no scenic vistas within the City. Long-range views of the Santa Cruz Mountains and the Diablo Range are available from roadways and public trails throughout Santa Clara. However, these views from public viewpoints are partially or completely obscured by existing development or vegetation and implementation of the proposed 2022 CAP would not have a substantial adverse effect on scenic resources. There are no state-designated scenic highways in the City of Santa Clara. Therefore, the proposed 2022 CAP actions would not substantially damage scenic resources within a state-designated scenic highway.

The City of Santa Clara is located within an urban environment. Implementation of the proposed 2022 CAP would, therefore, occur within urban environments and would be overseen as part of the City's development review process. The proposed 2022 CAP actions would not directly create new sources of light and glare. Indirectly, new development and redevelopment associated with implementation of the 2022 CAP would create new sources of light and glare such as from exterior building lighting as well as reflective solar panels. Future development and redevelopment projects would go through the City's Architectural Review process prior to issuance of building permits and would be reviewed for consistency with the City's Design Guidelines, all applicable zoning regulations, and other regulations concerning scenic quality.

4.1.2.2 *Conclusion*

The proposed 2022 CAP would not result in any new or substantially more severe aesthetics impacts than previously identified in the General Plan FEIR or the 2013 CAP Addendum. **(Same Impact as Approved Project)**

[11] Public views are those that are experienced from publicly accessible vantage points.

4.2 AGRICULTURE AND FORESTRY RESOURCES

4.2.1 Environmental Setting

4.2.1.1 *Regulatory Framework*

There have been no substantial changes to the regulatory framework for agricultural and forestry resources conditions since adoption of the 2013 CAP.

4.2.1.2 *Existing Conditions*

There have been no substantial changes to the environmental conditions for agricultural and forestry resources since adoption of the 2013 CAP.

4.2.2 Impact Discussion

	New Potentially Significant Impact	New Less than Significant with Mitigation Incorporated	New Less than Significant Impact	Same Impact as Approved Project	Less Impact than Approved Project
Would the project:					
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒	☐
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒	☐
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	☒	☐
d) Result in a loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒	☐
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒	☐

4.2.2.1 *Response*

The proposed project would involve implementation actions which would reduce citywide GHG emissions to achieve state mandated reduction goals. Proposed actions would occur within existing buildings and developed areas of the city and would not convert farmland, forest land, or Prime Farmland within the city limits of Santa Clara.

There is no land within the City of Santa Clara that meets the State of California definition of forest land or that is zoned for forestry uses.

4.2.2.2 *Conclusion*

The proposed 2022 CAP would not result in any new or substantially more severe agricultural or forestry resources impacts than previously identified in the General Plan FEIR or 2013 CAP Addendum. **(Same Impact as Approved Project)**

4.3 AIR QUALITY

4.3.1 Environmental Setting

4.3.1.1 *Regulatory Framework*

Clean Air Plan (2017)

In 2017, the Bay Area Air Quality Management District (BAAQMD), the agency primarily responsible for assuring that the federal and state ambient air quality standards are maintained in the San Francisco Bay Area, issued an update to the air quality plan for the Bay Area Air basin. The Bay Area 2017 Clean Air Plan (2017 CAP) focuses on two related BAAQMD goals: protecting public health and protecting the climate. To protect public health, the 2017 CAP describes how BAAQMD will continue its progress toward attaining state and federal air quality standards and eliminating health risk disparities from exposure to air pollution among Bay Area communities. To protect the climate, the 2017 CAP includes control measures designed to reduce emissions of methane and other super-GHGs that are potent climate pollutants in the near-term, and to decrease emissions of carbon dioxide by reducing fossil fuel combustion.[12]

4.3.1.2 *Existing Conditions*

BAAQMD continues to monitor trends in air pollution through measurements at regional air monitoring stations. Ozone and particulate matter remain criteria pollutants of concern along with community risks associated with toxic air contaminants (TACs). Table 4.3-1 shows pollutant monitoring results for the years 2017 to 2019 (the most recent data available) at the San José monitoring station (the nearest monitoring station to Santa Clara).

Table 4.3-1: Ambient Air Quality Standards Violations

Pollutant	Standard	Days Exceeding Standard		
		2017	2018	2019
SAN JOSÉ STATION				
Ozone	State 1-hour	4	0	2
	Federal 8-hour	4	0	2
Carbon Monoxide	Federal 8-hour	0	0	0
Nitrogen Dioxide	State 1-hour	0	0	0
PM_{10}	Federal 24-hour	0	0	0
	State 24-hour	6	0	4
$PM_{2.5}$	Federal 24-hour	6	15	
Source: BAAQMD. Air Pollution Summaries (2017 – 2019). Available at: https://www.baaqmd.gov/about-air-quality/air-quality-summaries				

[12] BAAQMD. *Final 2017 Clean Air Plan.* April 19, 2017. https://www.baaqmd.gov/plans-and-climate/air-quality-plans/current-plans

4.3.2 Impact Discussion

	New Potentially Significant Impact	New Less than Significant with Mitigation Incorporated	New Less than Significant Impact	Same Impact as Approved Project	Less Impact than Approved Project
Would the project:					
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☐	☒	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☒	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☐	☒	☐

4.3.2.1 *Response*

Building & Energy Actions

Air quality impacts associated with renovation of existing buildings and construction of new buildings were previously analyzed in the General Plan EIR and determined to be less than significant with implementation of Mitigation Measure 4.10-1, which calls for the City to prepare a Community Risk Reduction Plan for TAC concentrations resulting from new development within the City, and establish appropriate buffer distances for new development with residential uses or other sensitive receptors to protect them from existing sources of TACs. For these reasons, the implementation of the proposed 2022 CAP Building and Energy Strategies would not result in new or substantially more severe air quality impacts than those previously identified in the General Plan FEIR.

Transportation & Land Use Actions

Strategies such as the transition to electric vehicles, expanding clean mobility options, and advancing sustainable land uses would reduce vehicle miles traveled (VMT) and by extension, reduce fossil fuel consumption for transportation, thereby reducing air quality emissions from operation of fossil fuel powered vehicles, as well as reducing emissions associated with production and distribution of fossil fuels.

Materials & Consumption Actions

Strategies and measures related to increasing waste diversion, reducing landfilled food waste, and enhancing sustainable production and consumption of materials would result in reduced criteria pollutant emissions from waste processing.

Natural Systems & Water Resources Actions

Implementation of Strategy N1 would improve air quality from increased oxygen generated by trees and reduce energy consumption from building cooling, thereby reducing criteria pollutant and TAC emissions associated with energy generation. Implementation of Strategies N2 and N3 to enhance ecosystem resilience, and improve water supply and conservation, respectively, would reduce water use and result in a proportional reduction in criteria pollutant and TAC emissions from energy used to operate the water distribution systems

Climate Adaptation & Resilience Actions

Implementation of Strategies C1 and C2 would not result in new or substantially more severe air quality impacts than those previously identified in the General Plan FEIR.

4.3.2.2 *Conclusion*

The proposed 2022 CAP would not result in any new or substantially more severe air quality impacts than previously identified in the General Plan FEIR and 2013 CAP Negative Declaration. **(Same Impact as Approved Project)**

4.4 BIOLOGICAL RESOURCES

4.4.1 Environmental Setting

4.4.1.1 *Regulatory Framework*

There have been no substantive changes to the regulatory framework for biological resources since adoption of the 2013 CAP.

4.4.1.2 *Existing Conditions*

Numerous development projects have been approved and constructed since adoption of the 2013 CAP which have resulted in the loss of trees. All development projects are subject to the City's 2:1 tree replacement requirements for new construction. Additionally, these development projects were required to undergo environmental review and comply with City policies and design standards.

4.4.2 Impact Discussion

	New Potentially Significant Impact	New Less than Significant with Mitigation Incorporated	New Less than Significant Impact	Same Impact as Approved Project	Less Impact than Approved Project
Would the project:					
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or United States Fish and Wildlife Service (USFWS)?	☐	☐	☐	☒	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS?	☐	☐	☐	☒	☐
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒	☐

	New Potentially Significant Impact	New Less than Significant with Mitigation Incorporated	New Less than Significant Impact	Same Impact as Approved Project	Less Impact than Approved Project
Would the project:					
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒	☐

4.4.2.1 *Responses*

The proposed project would involve implementation actions which would reduce citywide GHG emissions to achieve state mandated reduction goals. Proposed actions would not change the areas in which new development or redevelopment would occur or allow development closer to sensitive habitats or habitats occupied by special status plants or wildlife species. It would not change policies or City Code requirements designed to protect riparian habitats or maintain the health of the City's urban forest.

As discussed in Section 4.9 Biological Resources, of the General Plan FEIR, the City of Santa Clara is located adjacent to but not located within the Santa Clara Valley Habitat Plan area. For these reasons, implementation of the proposed 2022 CAP would not conflict with provisions of an adopted Habitat Conservation Plan.

4.4.2.2 *Conclusions*

The proposed 2022 CAP would not result in any new or substantially more severe biological resources impacts than previously identified in the General Plan FEIR or 2013 CAP Negative Declaration. **(Same Impact as Approved Project)**

4.5 CULTURAL RESOURCES

4.5.1 Environmental Setting

4.5.1.1 *Regulatory Framework*

There have been no substantive changes to the regulatory framework for cultural resources since adoption of the 2013 CAP.

4.5.1.2 *Existing Conditions*

Since adoption of the 2013 CAP, no historic resources have been demolished within Santa Clara.

4.5.2 Impact Discussion

	New Potentially Significant Impact	New Less than Significant with Mitigation Incorporated	New Less than Significant Impact	Same Impact as Approved Project	Less Impact than Approved Project
Would the project:					
a) Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5?	☐	☐	☐	☒	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?	☐	☐	☐	☒	☐
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☐	☐	☒	☐

4.5.2.1 *Response*

Building, Energy, Transportation, & Land Use Actions

Cultural resources impacts associated with development and redevelopment of existing buildings were previously analyzed in the General Plan FEIR and determined to be less than significant with implementation of standard conditions of approval and compliance with existing state and local regulations at a programmatic level. The proposed project would involve implementation actions which would reduce citywide GHG emissions to achieve state mandated reduction goals. Proposed actions would occur within existing buildings and developed areas of the city and would not result in new impacts to cultural resources not previously considered in the General Plan FEIR. Project specific cultural resources impacts are examined through project level CEQA review. Retrofits of existing development would be subject to the City's permitting requirements and processes and reviewed for consistency with the City's Historic Preservation Ordinance and Landmarks Alteration Permit requirements which would ensure retrofits of existing development would not result in significant impacts to historic resources or adjacent development.

Other Actions

Implementation of the other actions which involve preparing the City for climate change, improving community resilience, improving water supply and conservation, enhancing ecosystem resilience, increasing the tree canopy, enhancing sustainable production and consumption, reducing landfilled food waste, and increasing waste diversion actions would not involve alteration and/or demolition of existing structures or substantive ground disturbing activities; for this reason, impacts to cultural resources would be less than significant.

Implementation of the policies to advance sustainable land uses and expand clean mobility options actions would involve encouraging transit-oriented development and sustainable development in underutilized non-residential areas of the city, as well as constructing transportation improvements to increase pedestrian, bicycle, and other non-single occupancy vehicle transportation modes. Cultural resources impacts associated with such increased density near transit were previously analyzed in the General Plan FEIR and found not to result in significant impacts with implementation of General Plan policies and existing regulations. Project level cultural resources impacts from implementation of the proposed transportation improvements for non-single occupancy vehicle transportation modes are not known at this time and would be examined through project level CEQA review.

4.5.2.2 *Conclusion*

The proposed 2022 CAP would not result in any new or substantially more severe cultural resources impacts than previously identified in the General Plan FEIR and the 2013 CAP Addendum. **(Same Impact as Approved Project)**

4.6 ENERGY

4.6.1 Environmental Setting

4.6.1.1 *Regulatory Framework*

Title 24

State Energy Efficiency Standards for Residential and Nonresidential buildings, as specified in Title 24, Part 6, of the California Code of Regulations, were established in 1978 in response to legislative mandate to reduce California's energy consumption. Title 24 is updated approximately every three years. The 2019 Standards which became effective January 1, 2020 improve upon the 2016 standards for construction of, and additions and alterations to, residential and nonresidential buildings. Compliance with Title 24 is mandatory at the time new building permits are issued by city and county governments.

Solar Electric Incentives

In 2020 SVP began offering the Low-Income Solar Grant Program that provides free solar panel systems to qualifying residents. This program increases the amount of renewable energy generated within the City and reduces the non-renewable energy demand of the City.

Reach Code

In 2021, the City Council adopted new Building Code Standards that reach beyond the state minimum requirements for energy use in building design and construction. Effective January 1, 2022, the Santa Clara Reach Code is focused on improving energy efficiency, increasing the electric vehicle charging infrastructure, and incentivizing the electrification of existing buildings. In addition, the Code mandates the use of electricity as a power source in new construction and limits the installation of natural gas plumbing and meters.

Green Fleet Policy

Implemented in 2019, this policy effort ensures that the City purchase and use the lowest emission vehicles available to reduce vehicle emissions, consumption of non-renewable resources, and maintenance/operating costs to the City.

EV Blueprint Plan

Developed in 2019 through a grant from the California Energy Commission, this blueprint outlines 14 program initiatives to improve Santa Clara's electric vehicle charging infrastructure to prepare to meet the state's goal to increase the number of zero-emissions vehicles to five million by 2030. Initiatives in the plan include updates to building codes, rebates and incentive programs, public-private partnerships, and changes to construction permitting requirements.

4.6.1.2 *Existing Conditions*

In January 2018, SVP began providing 100 percent carbon-free power to all residential customers.[13]

4.6.2 Impact Discussion

	New Potentially Significant Impact	New Less than Significant with Mitigation Incorporated	New Less than Significant Impact	Same Impact as Approved Project	Less Impact than Approved Project
Would the project:					
a) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☐	☐	☒
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒	☐

4.6.2.1 *Response*

Building & Energy Actions

Implementation of the CAP action to shift to electric fuels would reduce natural gas consumption and increase electricity demand by incentivizing conversion of existing buildings to all electric energy use. The proposed improve energy efficiency action would reduce the amount of energy used by new and existing development throughout the City by retrofitting existing municipal facilities, and incentivizing home energy upgrades. Additionally, implementation of a distributed energy resource pilot program would reduce solar energy loss, from lack of energy storage facilities by encouraging the installation of energy storage and micro-grid systems. Thus, implementation of these measures would result in less energy demand than that previously identified in the General Plan FEIR and 2013 CAP Negative Declaration and would not result in a significant impact to the environment due to wasteful, inefficient, or unnecessary consumption of energy resources. Furthermore, the proposed 2022 CAP actions would be consistent with state and local plans to facilitate the shift to carbon-free and renewable energy such as the renewable energy portfolio standard, Title 24, and the City's Reach Code. For these reasons, the proposed 2022 CAP would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

Transportation & Land Use Actions

The proposed CAP actions to transition vehicles to electric alternatives, expand clean mobility options, use non-single occupancy vehicle transportation modes, and advance sustainable land uses

[13] City of Santa Clara, Silicon Valley Power. "Power Content Label." Accessed October 27, 2021. https://www.siliconvalleypower.com/svp-and-community/about-svp/power-content-label.

would reduce gasoline consumption compared to that previously analyzed in the General Plan FEIR and 2013 CAP Negative Declaration. The proposed 2022 CAP actions would be consistent with state and local plans to facilitate conversion of the passenger vehicle fleet to electric vehicles such as the California Air Resources Board Advanced Clean Cars program, as well as the City's Green Fleet Program, and EV Blueprint Plan. For these reasons, the proposed 2022 CAP would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

Materials & Consumption Actions

The proposed CAP actions to increase waste diversion, reduce landfilled food waste, enhance sustainable production and consumption would reduce energy use from waste processing and consumer products production compared to that previously analyzed in the General Plan FEIR and 2013 CAP Negative Declaration. For this reason, the proposed 2022 CAP actions would not result in a significant impact to the environment due to wasteful, inefficient, or unnecessary consumption of energy. The proposed CAP actions would be consistent with waste diversion requirements in Title 24 and would, therefore, not conflict with or obstruct implementation of a state or local plan for renewable energy or energy efficiency.

Natural Systems & Water Resources Actions

The proposed CAP actions to increase the tree canopy, enhance ecosystem resilience, improve community resilience, and prepare for climate change would reduce building energy use during warmer months by reducing the urban heat island effect and prevent further increases in global temperatures. Proposed actions to improve water supply and conservation would reduce energy use from water distribution and wastewater treatment. Thus, implementation of these actions would result in less energy impact than previously identified in the General Plan FEIR and 2013 CAP Negative Declaration. For this reason, the proposed 2022 CAP actions would not result in a significant impact to the environment due to wasteful, inefficient, or unnecessary consumption of energy. The proposed CAP actions would be consistent with energy efficiency and water conservation requirements in Title 24 and would, therefore, not conflict with or obstruct implementation of a state or local plan for renewable energy or energy efficiency.

Community Resilience & Well-being Actions

The proposed CAP actions to develop a network of community resiliency centers and strengthen vital infrastructure to prepare for climate change would occur within existing buildings and developed areas of the City and would not involve any changes to land use, housing, or jobs such that it would result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, or conflict with a state or local renewable energy or energy efficiency plan. Impacts would be the same as those disclosed in the General Plan FEIR.

4.6.2.2 *Conclusion*

The proposed 2022 CAP would not result in any new or substantially more severe energy impacts than previously identified in the General Plan FEIR and the 2013 CAP Negative Declaration. **(Less Impact than Approved Project)**

4.7 GEOLOGY AND SOILS

4.7.1 Environmental Setting

4.7.1.1 *Regulatory Framework*

Since adoption of the 2013 CAP, the latest update to the California Building Code was incorporated into the Santa Clara City Code. Effective January 2020, all projects involving construction are required to comply with the 2019 editions of the California Residential, Commercial, Electrical, Plumbing, Mechanical, Energy, and Green Building Standards Codes. These regulations include standards and guidelines to prevent and reduce seismic and geological hazards and reduce soil erosion in the City of Santa Clara.

4.7.1.2 *Existing Conditions*

Overall, the geologic and soil conditions in the City have not changed since adoption of the 2013 CAP.

4.7.2 Impact Discussion

	New Potentially Significant Impact	New Less than Significant with Mitigation Incorporated	New Less than Significant Impact	Same Impact as Approved Project	Less Impact than Approved Project
Would the project:					
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:					
– Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault (refer to Division of Mines and Geology Special Publication 42)?	☐	☐	☐	☒	☐
– Strong seismic ground shaking?	☐	☐	☐	☒	☐
– Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒	☐
– Landslides?	☐	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☐	☒	☐

	New Potentially Significant Impact	New Less than Significant with Mitigation Incorporated	New Less than Significant Impact	Same Impact as Approved Project	Less Impact than Approved Project
Would the project:					
d) Be located on expansive soil, as defined in the current California Building Code, creating substantial direct or indirect risks to life or property?	☐	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒	☐
f) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	☐	☐	☐	☒	☐

4.7.2.1 *Response*

The proposed project would involve implementation actions which would reduce citywide GHG emissions to achieve state mandated reduction goals. Proposed actions would not change the areas of the City in which new development or redevelopment would occur or allow development on steeper slopes prone to landslides or other hazardous areas. No physical changes to the environment are proposed with implementation of the 2022 CAP which would result in substantial soil erosion, loss of topsoil, use of septic tanks, or directly or indirectly destroy a unique paleontological resource or unique geological feature. It would not change policies or City Code requirements designed to reduce substantial risks to people, structures, or infrastructure from geologic hazards.

The 2022 CAP includes water conservation measures which may result in the extension of recycled water lines. Ground disturbance from the extension of recycled water lines would be subject to the same General Plan policies previously identified to reduce risks to people, structures, or infrastructure from geologic hazards and would be subject to project-level CEQA review as a part of the development permit process.

4.7.2.2 *Conclusion*

The proposed 2022 CAP would not result in any new or substantially more severe geology and soils impacts than previously identified in the General Plan FEIR and the 2013 CAP Negative Declaration. **(Same Impact as Approved Project)**

4.8 GREENHOUSE GAS EMISSIONS

The following discussion is based on the 2022 CAP Update prepared by Cascadia Consulting and included as Appendix A to this Addendum.

4.8.1 Environmental Setting

4.8.1.1 *Regulatory Framework*

State

Executive Order S-3-05

Governor Arnold Schwarzenegger issued Executive Order S-3-05 (EO S-3-05) in 2005 establishing the following near-term, mid-term, and long-term GHG emission reduction targets for California:

- By 2010, reduce GHG emissions to 2000 levels;
- By 2020, reduce GHG emissions to 1990 levels;
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

The long-term 2050 target represents the level scientists believe is necessary to reach atmospheric GHG concentrations (below 350 ppm CO_2e) that will stabilize climate change. The California Global Warming Solutions Act of 2006, commonly known as AB 32, further detailed and put into law the midterm GHG reduction target established in EO S-3-05 to reduce statewide GHG emissions to 1990 levels by 2020 and created a comprehensive, multi-year program to reduce GHG emissions in California.

Senate Bill 32

In 2016, Senate Bill (SB) 32 was signed into law, amending the California Global Warming Solutions Act. SB 32, and accompanying Executive Order B-30-15, require CARB to ensure that statewide GHG emissions are reduced to 40 percent below the 1990 level by 2030. CARB updated it Climate Scoping Plan in December 2017 to express the 2030 statewide target in terms of million metric tons of CO_2e ($MMTCO_2e$). Based on the emissions reductions directed by SB 32, the annual 2030 statewide target emissions level for California is 260 $MMTCO_2e$.

Regional and Local

2017 Clean Air Plan

To protect the climate, the 2017 CAP (prepared by BAAQMD) includes control measures designed to reduce emissions of methane and other super-GHGs that are potent climate pollutants in the near-term, and to decrease emissions of carbon dioxide by reducing fossil fuel combustion.

Solar Electric Incentives

In 2020 SVP began offering the Low-Income Solar Grant Program that provides free solar panel systems to qualifying residents. This program increases the amount of renewable energy generated within the City and reduces the non-renewable energy demand of the City.

Reach Code

In 2021, the City Council adopted new Building Code Standards that reach beyond the state minimum requirements for energy use in building design and construction. Effective January 1, 2022, the Santa Clara Reach Code is focused on improving energy efficiency, increasing the electric vehicle charging infrastructure, and incentivizing the electrification of existing buildings. In addition, the Code mandates the use of electricity as a power source in new construction and limits the installation of natural gas plumbing and meters.

Green Fleet Policy

Implemented in 2019, this policy effort ensures that the City purchase and use the lowest emission vehicles available to reduce vehicle emissions, consumption of non-renewable resources, and maintenance/operating costs to the city.

EV Blueprint Plan

Developed in 2019 through a grant from the California Energy Commission, this blueprint outlines 14 program initiatives to improve Santa Clara's electric vehicle charging infrastructure to prepare to meet the state's goal to increase the number of zero-emissions vehicles to 5 million by 2030. Initiatives in the plan include updates to building codes, rebates and incentive programs, public-private partnerships, and changes to construction permitting requirements.

Bicycle Master Plan

An update to the existing Bicycle Master Plan was approved by City Council in 2018. This plan outlines the City's long-term vision for improving the cycling infrastructure through policies, programs, and City-run projects. Initiatives are focused on creating an integrated cycling network, improving safety for cyclists, making cycling a more convenient transportation option, and fostering a more bike-friendly culture in Santa Clara.[14]

Pedestrian Master Plan

Adopted in 2019, this is a blueprint for making Santa Clara more walkable, with particular focus on creating an integrated pedestrian network; making walkways safer, more enjoyable, and easier to navigate; and integrating walking into land use policy to make walking a more convenient mode of everyday transportation.[15]

Complete Streets Policy

[14] City of Santa Clara. 2019. Bicycle Plan Update 2018.
[15] City of Santa Clara. 2019. Pedestrian Master Plan.

This policy outlines specific principles for ensuring that city roadways are safe, accessible, and convenient for all transportation types, including pedestrians, motorists, bicyclists, persons with disabilities, and seniors.

Creek Trail Master Plan Expansion

Identified as a priority by the City Council in 2013, the Creek Trail Expansion Plan improves the existing on-street bicycle transportation system by developing bicycle and pedestrian creek trails along 5.75 miles of the Calabazas Creek Corridor, 3.25 miles of the Saratoga Creek Corridor and 1.75 miles of the Hetch Hetchy corridor.[16]

Transportation Analysis Policy

Adopted in 2020, this policy establishes the requirements for evaluating land use and transportation projects based on the estimated VMT for that project.[17] This regulatory change established a new threshold for CEQA significance and incentivized infill development and projects that are accessible via mass transit and active modes of travel, contributing to a reduction in GHG emissions from transportation.

Specific Plans

Since adoption of the 2013 CAP, the City Council has adopted three new specific plans: Tasman East, Lawrence Station, and Patrick Henry Drive; and is in the process of developing two other comprehensive plans: the Downtown Precise Plan, and the El Camino Real Specific Plan. The City is also working on the Freedom Circle Focus Area that will add capacity to the General Plan for the development of a future specific plan. These neighborhood-specific plans outline General Plan development areas of Santa Clara where there is opportunity to intensify development with limited impact on the existing neighborhoods. Plans include initiatives focused on making the areas more pedestrian friendly and promoting sustainable, dense housing developments.[18]

4.8.1.2 *Existing Conditions*

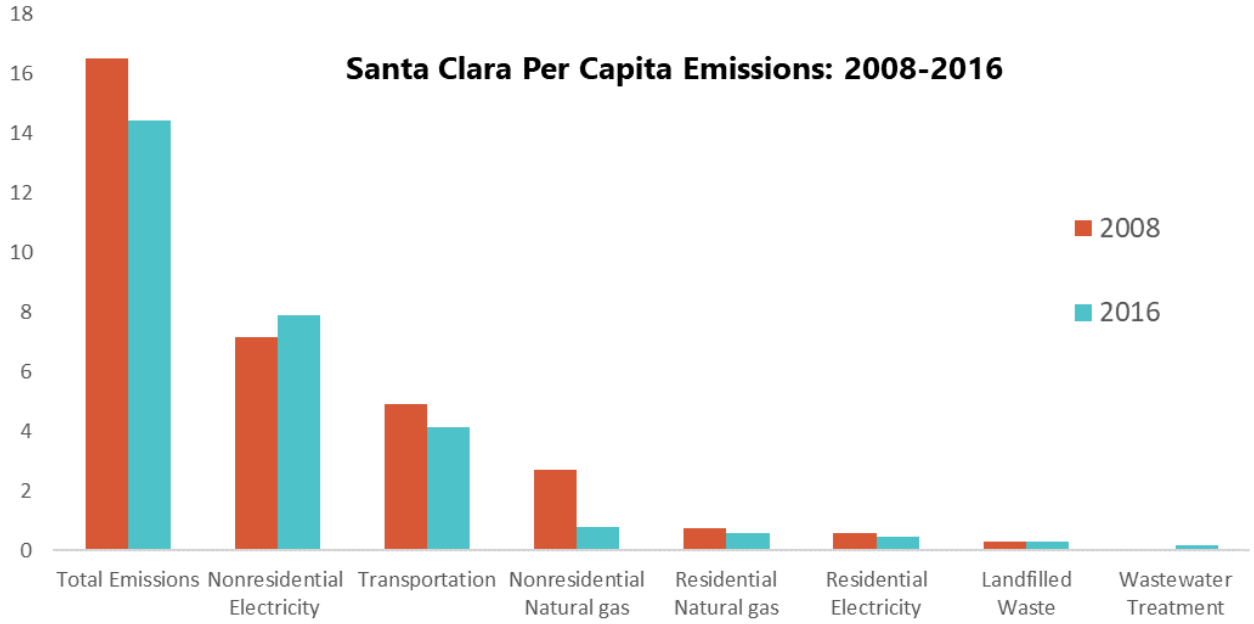
2016 Baseline Inventory Emissions

An inventory of Santa Clara's community wide GHG emissions in 2016 and a comparison to the 2008 inventory is provided in Appendix A. A summary of the results of this inventory is provided below. Details on the methodologies used for estimating emissions are also provided in Appendix A.

GHG emissions in 2016 totaled an estimated 1,790,833 $MTCO_2e$. In contrast, Santa Clara's community wide inventory in 2008 totaled 1,862,824 $MTCO_2e$. Total emissions and a breakdown by sector is provided in Figure 4.8-1 below.

[16] City of Santa Clara. 2013. City of Santa Clara Creek Trail Network Expansion Feasibility Study.
[17] City of Santa Clara. 2020. Transportation Analysis Policy.
[18] City of Santa Clara. Specific Plans.

Figure 4.8-1: Emissions by Sector



Source: Cascadia Consulting, 2022 CAP

Between 2008 and 2016, Santa Clara's GHG emissions have declined by approximately 4.5 percent. In 2016, more than half of the citywide emissions were associated with non-residential energy demand, an increase of 20 percent compared to emissions for this sector in 2008. This increase is likely the result of post-recession economic growth and the increase in data centers constructed in Santa Clara during this period. Approximately one-third of the citywide emissions were from transportation.[19]

Emissions Reductions Not Included in 2016 Inventory

Following completion of the 2016 Inventory, in 2018, SVP eliminated coal from its energy mix and began providing residential customers carbon-free electricity consistent with California's Renewable Portfolio Standard. California's Renewable Portfolio Standard requires that electricity sold by utilities be 33 percent renewable by 2020, 60 percent renewable by 2030, and 100 percent carbon free by 2045. As a result, emissions from residential electricity demand would be reduced to zero by 2045.[20] This emissions reduction is not reflected in the 2016 baseline emissions.

[19] City of Santa Clara. 2022 Draft Climate Action Plan. December 2021.
[20] City of Santa Clara. 2022 Draft Climate Action Plan. December 2021.

4.8.2 Impact Discussion

	New Potentially Significant Impact	New Less than Significant with Mitigation Incorporated	New Less than Significant Impact	Same Impact as Approved Project	Less Impact than Approved Project
Would the project:					
a) Generate greenhouse gas (GHG) emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☐	☐	☒
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs?	☐	☐	☐	☐	☒

4.8.2.1 *Response*

The proposed 2022 CAP would involve implementation of the identified actions and reduction measures specifically designed to reduce citywide GHG emissions consistent with established reduction targets. As noted in Figure 3.2-1, according to the emissions estimates based on the most recent GHG emissions inventory, Santa Clara is projected to generate 1,497,040 $MTCO_2e$ per year by 2030.

A summary of the GHG reductions estimated to result from implementation of the proposed project are included in Table 4.8-1 and Table 4.8-2.

Table 4.8-1: 2022 CAP Actions and Reduction Estimates

Proposed Action	2030 Reduction MT CO2e
Decarbonize buildings	42,812
Reduce energy consumption	67,263
Shift to clean, renewable energy sources	192,248
Transition to electric vehicles	92,264
Reduce the number of daily miles traveled by car	152,340
Enact more sustainable city planning	N/A
Planting more trees	N/A
Making ecosystems more resilient	37
Conserving and expanding our water supply	3,588
Total	**550,553**

Source: City of Santa Clara. 2022 Draft CAP. December 2021.

Table 4.8-2: Achievement of CAP Targets	
GHG Target Impact	**MTCO2e/year**
2030 Emissions without CAP	1,497,040
Estimated CAP reduction	550,553
2030 Emissions with Proposed CAP (total)	946,487
2030 Target	950,040
Target Met?	**Yes**

As shown in Table 4.8-2, the proposed 2022 CAP would reduce overall citywide GHG emissions by approximately 550,553 $MTCO_2e$ per year, resulting in citywide GHG emissions of 946,487 $MTCO_2e$ in 2030, which is below the 2030 target of 950,040 $MTCO_2e$ per year. For these reasons, the proposed 2022 CAP would not generate GHG emissions that may have a significant impact on the environment or conflict with a plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGS.

4.8.2.2 *Conclusion*

The proposed 2022 CAP would reduce GHG emissions and would not result in any new or substantially more severe GHG emissions impacts than previously identified in the General Plan FEIR or the 2013 CAP Negative Declaration. **(Less Impact than Approved Project)**

4.9 HAZARDS AND HAZARDOUS MATERIALS

4.9.1 Environmental Setting

4.9.1.1 *Regulatory Framework*

The regulatory framework, in terms of federal, state, and local requirements related to hazards and hazardous materials use and the characterization and clean-up of contaminated sites is similar to that at the time of adoption of the 2013 CAP.

4.9.1.2 *Existing Conditions*

Citywide, hazardous materials use and storage and contaminants of concern to regulatory agencies are similar to that described in the Negative Declaration prepared for the 2013 CAP.

4.9.2 Impact Discussion

	New Potentially Significant Impact	New Less than Significant with Mitigation Incorporated	New Less than Significant Impact	Same Impact as Approved Project	Less Impact than Approved Project
Would the project:					
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒	☐

	New Potentially Significant Impact	New Less than Significant with Mitigation Incorporated	New Less than Significant Impact	Same Impact as Approved Project	Less Impact than Approved Project
Would the project:					
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒	☐
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒	☐
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	☐	☐	☐	☒	☐

4.9.2.1 *Response*

The proposed project would involve implementation actions which would reduce citywide GHG emissions to achieve state mandated reduction goals. Proposed actions would not change the areas of the City in which new development or redevelopment would occur or allow development in hazardous areas not previously identified in the General Plan FEIR. It would not change policies or City Code requirements designed to reduce substantial risks to people, structures, or infrastructure from hazards and hazardous materials, including airport safety hazards and wildfires. Implementation of the proposed 2022 CAP would not result in any direct physical changes to the environment or physically interfere with an emergency response or evacuation plan. Project level hazards and hazardous materials impacts from implementation of the proposed 2022 CAP actions are not known at this time and would be examined through project level CEQA review during the development permit process.

4.9.2.2 *Conclusion*

The proposed 2022 CAP would not result in any new or substantially more severe hazards and hazardous materials impacts than previously identified in the General Plan FEIR and the 2013 CAP Negative Declaration. **(Same Impact as Approved Project)**

4.10 HYDROLOGY AND WATER QUALITY

4.10.1 Environmental Setting

4.10.1.1 *Regulatory Framework*

There have been no substantial changes to the regulatory framework for hydrology and water quality since the 2013 CAP.

4.10.1.2 *Existing Conditions*

Watersheds within the City of Santa Clara remain the same as described in the 2013 CAP Negative Declaration. Projected sea level rise and flooding remain a concern in areas near the Bayshore. Various state and regional agencies have initiated planning efforts to predict the potential extent of sea level rise and storm surge.

4.10.2 Impact Discussion

	New Potentially Significant Impact	New Less than Significant with Mitigation Incorporated	New Less than Significant Impact	Same Impact as Approved Project	Less Impact than Approved Project
Would the project:					
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	☐	☐	☐	☒	☐
– result in substantial erosion or siltation on- or off-site;	☐	☐	☐	☒	☐
– substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	☐	☐	☐	☒	☐

	New Potentially Significant Impact	New Less than Significant with Mitigation Incorporated	New Less than Significant Impact	Same Impact as Approved Project	Less Impact than Approved Project
Would the project:					
– create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☐	☒	☐
– impede or redirect flood flows?	☐	☐	☐	☒	☐
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒	☐
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☒	☐

4.10.2.1 *Response*

The proposed project would involve implementation actions which would reduce citywide GHG emissions to achieve state mandated reduction goals. Implementation of the proposed 2022 CAP would not change the areas of the City in which new development or redevelopment would occur or allow development in flood zones or groundwater recharge areas not previously identified in the General Plan FEIR. It does not change City policies or City Code requirements designed to: 1) reduce substantial risks to people, structures, or infrastructure from flooding and stormwater runoff or 2) minimize and reduce water quality impacts associated with new or existing development. Project level hydrology and water quality impacts from implementation of the proposed 2022 CAP actions are not known at this time and would be examined through project level CEQA review during the development permit process.

4.10.2.2 *Conclusion*

The proposed 2022 CAP would not result in any new or substantially more severe hydrology and water quality impacts than previously identified in the General Plan FEIR and the 2013 CAP Negative Declaration. **(Same Impact as Approved Project)**

4.11 LAND USE AND PLANNING

4.11.1 Environmental Setting

4.11.1.1 *Regulatory Framework*

The regulatory framework, in terms of land use is similar to that at the time of adoption of the 2013 CAP.

4.11.1.2 *Existing Conditions*

Since adoption of the 2013 CAP, the city has approved numerous general plan amendments and rezoning requests which have changed the land use conditions in the city. These projects were required to undergo environmental review and comply with City policies and design standards to avoid division of established communities, and reduce environmental impacts.

4.11.2 Impact Discussion

	New Potentially Significant Impact	New Less than Significant with Mitigation Incorporated	New Less than Significant Impact	Same Impact as Approved Project	Less Impact than Approved Project
Would the project:					
a) Physically divide an established community?	☐	☐	☐	☒	☐
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒	☐

4.11.2.1 *Response*

The proposed project would involve implementation actions which would reduce citywide GHG emissions to achieve state mandated reduction goals. Implementation actions proposed in the 2022 CAP would not change the areas of the City in which new development or redevelopment would occur or allow development which would physically divide existing communities (such as new roads) or create a significant environmental impact due to conflict with existing land use plans or policies.

4.11.2.2 *Conclusion*

The proposed 2022 CAP would not result in any new or substantially more severe land use impacts than previously identified in the General Plan FEIR and the 2013 CAP Negative Declaration. **(Same Impact as Approved Project)**

4.12 MINERAL RESOURCES

4.12.1 Environmental Setting

4.12.1.1 *Regulatory Framework*

There have been no substantial changes to the regulatory framework for mineral resources identified in the 2013 CAP Negative Declaration.

4.12.1.2 *Existing Conditions*

There have been no substantial changes to environmental conditions regarding mineral resources within the City of Santa Clara.

4.12.2 Impact Discussion

	New Potentially Significant Impact	New Less than Significant with Mitigation Incorporated	New Less than Significant Impact	Same Impact as Approved Project	Less Impact than Approved Project
Would the project:					
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒	☐
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒	☐

4.12.2.1 *Response*

Mineral resources were addressed in Section 4.5.4.3 of the General Plan FEIR. No significant impacts to mineral resources of regional or statewide significance were identified. Therefore, similar to the certified General Plan FEIR, implementation of the proposed 2022 CAP would not result in impacts to mineral resources.

4.12.2.2 *Conclusion*

The proposed 2022 CAP would not result in any new or substantially more severe mineral resources impacts than previously identified in the General Plan FEIR and the 2013 CAP Negative Declaration. **(Same Impact as Approved Project)**

4.13 NOISE

4.13.1 Environmental Setting

4.13.1.1 *Regulatory Framework*

There have been no substantial changes to the regulatory framework for noise and vibration identified in the 2013 CAP Negative Declaration.

4.13.1.2 *Existing Conditions*

Since adoption of the General Plan, the volume of vehicle trips have increased along with the increased population in Santa Clara, resulting in increased noise levels on some roadways, as projected in the General Plan FEIR.[21]

4.13.2 Impact Discussion

	New Potentially Significant Impact	New Less than Significant with Mitigation Incorporated	New Less than Significant Impact	Same Impact as Approved Project	Less Impact than Approved Project
Would the project result in:					
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☐	☒	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☒	☐
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒	☐

4.13.2.1 *Response*

Building & Energy Actions

Implementation of the CAP actions to shift to electric fuels, retrofit existing municipal facilities, incentivize home energy upgrades, and implement a distributed energy resource pilot program would involve improvements to new and existing buildings. Noise and vibration impacts associated with new development and redevelopment of existing buildings in Santa Clara were previously analyzed

[21] City of Santa Clara. *Integrated Final Environmental Impact Report for the City of Santa Clara Draft 2010- 2035 General Plan Volume I, EIR Text.* January 2011. Page 438 -455.

in the General Plan FEIR and determined to have a less than significant impact with implementation of standard conditions of approval and compliance with General Plan policies. The proposed 2022 CAP would involve implementation actions which would reduce citywide GHG emissions to achieve state mandated reduction goals. Proposed actions would occur within existing buildings and developed areas of the City and would not result in new noise and vibration impacts not previously considered in the General Plan FEIR. Therefore, noise and vibration impacts would be less than significant, same as the approved project.

Transportation & Land Use Actions

Electric vehicles and other non-motorized modes of transportation generate lower noise levels than standard combustion engine vehicles. The proposed CAP actions to transition vehicles to electric alternatives, expand clean mobility options, use non-single occupancy vehicle transportation modes, and advance sustainable land uses would reduce the number of vehicle trips taken in the City using combustion engine vehicle. Therefore, implementation of these actions would reduce traffic noise levels compared to those identified in the General Plan FEIR.

Materials & Consumption Actions

The proposed CAP actions to increase waste diversion, reduce landfilled food waste, enhance sustainable production and consumption would not result in physical changes to the environment such that significant noise and vibration impacts would occur. Therefore, noise and vibration impacts would be less than significant, same as the approved project.

Natural Systems & Water Resources Actions

The proposed CAP actions to increase the tree canopy, enhance ecosystem resilience, improve community resilience, and prepare for climate change and would not result in physical changes to the environment such that significant noise and vibration impacts would occur. Therefore, noise and vibration impacts would be less than significant, same as the approved project.

4.13.2.2 *Conclusions*

The proposed 2022 CAP would not result in any new or substantially more severe noise and vibration impacts than previously identified in the General Plan FEIR and the 2013 CAP Negative Declaration. **(Same Impact as Approved Project)**

4.14 POPULATION AND HOUSING

4.14.1 Environmental Setting

4.14.1.1 *Regulatory Framework*

Housing Element Update (2015 – 2023)

In December 2014, the City Council Adopted the 2015-2023 Housing Element Update which is one of the seven state-required elements of the General Plan and provides important information for the California Department of Housing and Community Development and California Department of Finance calculations of statewide housing needs.

4.14.1.2 *Existing Conditions*

In 2013, the population of Santa Clara was 121,459[22] and there were 136,980 jobs.[23] The current population is 130,746,[24] and there are an estimated 143,565 jobs.[25]

4.14.2 Impact Discussion

	New Potentially Significant Impact	New Less than Significant with Mitigation Incorporated	New Less than Significant Impact	Same Impact as Approved Project	Less Impact than Approved Project
Would the project:					
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒	☐
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒	☐

[22] California Department of Finance. *E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011- 2021 with 2010 Census Benchmark.* May 2021. https://www.dof.ca.gov/Forecasting/Demographics/Estimates/e-5/

[23] Association of Bay Area Governments. "Projections 2040, Total Employment." Accessed September 17, 2021. http://projections.planbayarea.org/data

[24] California Department of Finance. *E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011- 2021 with 2010 Census Benchmark.* May 2021. https://www.dof.ca.gov/Forecasting/Demographics/Estimates/e-5/

[25] Association of Bay Area Governments. "Projections 2040, Total Employment." Accessed September 17, 2021. http://projections.planbayarea.org/data

4.14.2.1 *Response*

The proposed 2022 CAP involves implementation actions which would reduce citywide GHG emissions to achieve state mandated reduction goals. Proposed actions would occur within existing buildings and developed areas of the City and would not involve changes to land use, housing, or jobs such that the City's population would exceed levels previously identified and analyzed in the General Plan FEIR.

Moreover, because the proposed 2022 CAP update includes implementation actions and does not involve specific development projects, it would not result in direct displacement of substantial numbers of existing people or housing such that construction of replacement housing would be necessary.

4.14.2.2 *Conclusions*

The proposed 2022 CAP would not result in any new or substantially more severe population and housing impacts than previously identified in the General Plan FEIR and the 2013 CAP Negative Declaration. **(Same Impact as Approved Project)**

4.15 PUBLIC SERVICES

4.15.1 Environmental Setting

4.15.1.1 *Regulatory Framework*

There have been no substantial changes to the regulatory framework for public services since the 2013 CAP Negative Declaration.

4.15.1.2 *Existing Conditions*

To accommodate increased demand on fire protection services resulting from the recently approved Related Santa Clara development project in northeast Santa Clara, two of the City's fire stations (Station 8 and Station 10) are undergoing renovations. Renovations to Fire Station 8 were completed in February 2020 and included a new dormitory wing, all-gender bathrooms, fitness room, workshop, and turnout storage room. Fire Station 10 closed March 1, 2020, to allow for construction of a new fire station at a location to be determined when land is secured.

Since adoption of the 2013 CAP, the City has rehabilitated and expanded four existing neighborhood and community parks, Agnew Park, Fuller Park, Machado Park, and Meadow Park. Improvements made to these parks are included below.

- Agnew Park improvements included a new playground that features a triple slide, swings, and climbing wall.
- Fuller Park was enhanced to complete the original park master plan "Phase Two". Improvements made to this park included a volleyball court, basketball half court and fitness equipment cluster. In addition, accessibility improvements were made to and from the park and surrounding area.
- Machado Park was rehabilitated with two new playground areas, one for children 2-5 years old and one for those 6-12 years old, plus ramp access to a hillside slide.
- Meadow Park was expanded to include new play spaces with natural meadow habitat, redwood trail with fitness stations, restroom, and a group picnic area.

In January 2012, the Santa Clara Unified School District Board of Trustees approved the Agnews Campus project, which will construct three new schools (one elementary, one middle, and one high school) on a 55-acre site at 3500 Zanker Road in North San José. Since adoption of the 2013 CAP, construction of the elementary and middle schools (Abram Agnew Elementary and Dolores Huerta Middle School) has been completed and both schools are operational as of September 2021.[26] Construction of the high school (Kathleen MacDonald High School) is ongoing with a target opening date of Fall 2022.

There have been no substantial changes to the environmental conditions for police protection services, libraries, and other public facilities in the City of Santa Clara.

[26] Santa Clara Unified School District. "Agnew/Huerta Frequently Asked Questions." Accessed September 17, 2021. https://www.santaclarausd.org/Page/3502

4.15.2 Impact Discussion

	New Potentially Significant Impact	New Less than Significant with Mitigation Incorporated	New Less than Significant Impact	Same Impact as Approved Project	Less Impact than Approved Project
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:	☐	☐	☐	☒	☐
a) Fire Protection?	☐	☐	☐	☒	☐
b) Police Protection?	☐	☐	☐	☒	☐
c) Schools?	☐	☐	☐	☒	☐
d) Parks?	☐	☐	☐	☒	☐
e) Other Public Facilities?					

4.15.2.1 *Response*

The proposed 2022 CAP involves implementation actions designed to reduce GHG emissions produced throughout the City to achieve state mandated reduction goals. Proposed actions would occur within existing buildings and previously developed areas of the City and would not involve any changes to land use, housing, or jobs such that the city's service population would exceed levels previously identified and analyzed in the General Plan FEIR. For these reasons, the proposed 2022 CAP would not result in substantial adverse physical impact associated with the provision of new or physically altered facilities for fire protection, police protection, schools, parks, or other public facilities.

4.15.2.2 *Conclusions*

The proposed 2022 CAP would not result in any new or substantially more severe public services impacts than previously identified in the General Plan FEIR and the 2013 CAP Negative Declaration. **(Same Impact as Approved Project)**

4.16 RECREATION

4.16.1 Environmental Setting

4.16.1.1 *Regulatory Framework*

There have been no substantial changes to the regulatory framework for recreation.

4.16.1.2 *Existing Conditions*

Since adoption of the 2013 CAP, the City has rehabilitated and expanded existing facilities at the following neighborhood and community parks and senior center and constructed the following new parks.

- Nuevo Community Park, a new park located at 3505 Kifer Road, opened in the Summer 2021
- Fitness Equipment was added to the Santa Clara Senior Center, located at 1303 Fremont Street, in the Summer 2021.
- Raymond G. Gamma Dog Park, located at 888 Reed Street, was rehabilitated and reopened in June 2021.
- Creekside Park, a new park located at 3225 Scott Boulevard, opened in January 2021.
- Homeridge Park Playground, located at 2985 Stevenson Street, was rehabilitated and reopened in December 2020.
- Reed & Grant Sports Park, a new park located at 720 Reed Street, opened in October 2020.
- Agnew Park playground, located at 2150 Agnew Road, was rehabilitated and reopened in 2020.
- Fuller Park, located at 61 Fuller Street, was rehabilitated and reopened in 2020.
- Machado Park, located at 3360 Cabrillo Avenue was rehabilitated and reopened in 2020.
- Meadow Park and Redwood Trail, a new park located at 3360 Octavius Drive opened in 2020.
- Bowers Park Playground, located at 2582 Cabrillo Avenue was rehabilitated and reopened in 2019.
- Larry J. Marsalli Park Off-Leash Dog Area, located at 1425 Lafayette Street was rehabilitated and reopened in 2018.
- Everett N. “Eddie” Souza Neighborhood Park & Community Garden, located at 2350 Monroe Street was rehabilitated and reopened in 2018.
- Bill Wilson Jr. Park, located at 2902 Miles Drive was rehabilitated and reopened in 2018.
- Steve Carli Park Playground, located at 1045 Los Padres Boulevard, was rehabilitated and reopened in 2017.
- Bracher Park, located at 2560 Alhambra Drive was rehabilitated and reopened in 2016.

4.16.2 Impact Discussion

		New Potentially Significant Impact	New Less than Significant with Mitigation Incorporated	New Less than Significant Impact	Same Impact as Approved Project	Less Impact than Approved Project
a)	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒	☐
b)	Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒	☐

4.16.2.1 *Response*

The proposed 2022 CAP involves implementation actions designed to reduce citywide GHG emissions and to achieve state mandated reduction goals. Proposed actions would occur within existing buildings and previously developed areas of the City and would not involve any changes to land use, housing, or jobs such that the city's service population would exceed levels previously identified and analyzed in the General Plan FEIR. For these reasons, the proposed 2022 CAP would not increase use of existing neighborhood and regional parks or recreational facility such that substantial physical deterioration would occur or require construction or expansion of recreational facilities resulting in an adverse physical impact on the environment.

4.16.2.2 *Conclusions*

The proposed 2022 CAP would not result in any new or substantially more severe recreation impacts than previously identified in the General Plan FEIR and the 2013 CAP Negative Declaration. **(Same Impact as Approved Project)**

4.17 TRANSPORTATION

4.17.1 Environmental Setting

4.17.1.1 *Regulatory Framework*

Regional

Regional Transportation Plan

In October 2021, the Metropolitan Transportation Commission and the Association of Bay Area Governments adopted Plan Bay Area 2050, which includes a Regional Transportation Plan to guide regional transportation investments for revenues from federal, state, regional, and local sources through 2050. The plan also includes transportation strategies to maintain and optimize the existing transportation system, create health and safe streets, and build a next-generation transit network.

Local

Bicycle Master Plan

An update to the existing Bicycle Master Plan was approved by City Council in 2018. This plan outlines the City's long-term vision for improving the cycling infrastructure through policies, programs, and City-run projects. Initiatives are focused on creating an integrated cycling network, improving safety for cyclists, making cycling a more convenient transportation option, and fostering a more bike-friendly culture in Santa Clara.[27]

Pedestrian Master Plan

Adopted in 2019, this is a blueprint for making Santa Clara more walkable, with particular focus on creating an integrated pedestrian network; making walkways safer, more enjoyable, and easier to navigate; and integrating walking into land use policy to make walking a more convenient mode of everyday transportation.[28]

Complete Streets Policy

This policy outlines specific principles for ensuring that city roadways are safe, accessible, and convenient for all transportation types, including pedestrians, motorists, bicyclists, persons with disabilities, and seniors.

Creek Trail Master Plan Expansion

Identified as a priority by the City Council in 2013, the Creek Trail Expansion Plan improves the existing on-street bicycle transportation system by developing bicycle and pedestrian creek trails along 5.75 miles of the Calabazas Creek Corridor, 3.25 miles of the Saratoga Creek Corridor and 1.75 miles of the Hetch Hetchy corridor.[29]

[27] City of Santa Clara. 2019. Bicycle Plan Update 2018.
[28] City of Santa Clara. 2019. Pedestrian Master Plan.
[29] City of Santa Clara. 2013. City of Santa Clara Creek Trail Network Expansion Feasibility Study.

City of Santa Clara Transportation Analysis Policy

Adopted in 2020, this policy establishes the requirements for evaluating land use and transportation projects based on the estimated VMT for that project.[30] This regulatory change established a new threshold for CEQA significance and incentivized infill development and projects that are accessible via mass transit and active modes of travel.

Specific Plans

Since adoption of the 2013 CAP, the City Council has adopted three new specific plans: Tasman East, Lawrence Station, and Patrick Henry Drive; and is in the process of developing two other comprehensive plans: the Downtown Precise Plan, and the El Camino Real Specific Plan. The City is also working on the Freedom Circle Focus Area that will add capacity to the General Plan for the development of a future specific plan. These neighborhood-specific plans outline General Plan development areas of Santa Clara where there is opportunity to intensify development with limited impact on the existing neighborhood. Plans include initiatives focused on making the areas more pedestrian friendly and promoting sustainable, dense housing developments.[31]

4.17.1.2 *Existing Conditions*

As of the Winter of 2022, the San Tomas Aquinas Trail was constructed by the County of Santa Clara and stretches between El Camino Real and Homestead Road. In addition, the City has added numerous bike lanes to existing roadways throughout the city. These improvements have increased pedestrian and bicycle accessibility since adoption of the 2013 CAP.

4.17.2 Impact Discussion

	New Potentially Significant Impact	New Less than Significant with Mitigation Incorporated	New Less than Significant Impact	Same Impact as Approved Project	Less Impact than Approved Project
Would the project:					
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle lanes, and pedestrian facilities?	☐	☐	☐	☒	☐
b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	☐	☐	☐	☒	☐
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒	☐

[30] City of Santa Clara. 2020. Transportation Analysis Policy.
[31] City of Santa Clara. Specific Plans.

	New Potentially Significant Impact	New Less than Significant with Mitigation Incorporated	New Less than Significant Impact	Same Impact as Approved Project	Less Impact than Approved Project
Would the project:					
d) Result in inadequate emergency access?	☐	☐	☐	☒	☐

4.17.2.1 *Responses*

Transportation & Land Use Actions

The proposed CAP actions to transition vehicles to electric alternatives, expand clean mobility options, use non-single occupancy vehicle transportation modes, and advance sustainable land uses would reduce VMT and the number of vehicle trips taken in the City using single-occupancy vehicles and would not conflict with existing transportation programs or policies such as the City's Bicycle Master Plan, Pedestrian Master Plan, Complete Streets Policy, Creek Trail Master Plan Expansion, and Transportation Analysis Policy. No specific development projects would occur with implementation of the proposed actions such that changes to the physical environment would occur resulting in geometric hazards or inadequate emergency access, consistent with the conclusions of the General Plan FEIR.

Other Actions

The proposed 2022 CAP involves implementation actions which would reduce citywide GHG emissions to achieve reduction goals. Proposed actions would occur within existing buildings and developed areas of the City and would not involve any changes to land use, housing, or jobs such that it would conflict with an existing transportation program or policy, create geometric hazards or result in inadequate emergency access, consistent with the conclusions of the General Plan FEIR. Project level transportation impacts from implementation of the proposed 2022 CAP actions are not known at this time and would be examined through project level CEQA review during the development permit process.

4.17.2.2 *Conclusions*

The proposed 2022 CAP would not result in any new or substantially more severe transportation impacts than previously identified in the General Plan FEIR and the 2013 CAP Negative Declaration. **(Same Impact as Approved Project)**

4.18 TRIBAL CULTURAL RESOURCES

4.18.1 Environmental Setting

4.18.1.1 *Regulatory Framework*

Since adoption of the 2013 CAP, California Assembly Bill 52 (AB 52) was passed in November 2014, which expands CEQA by identifying a new resource category, "tribal cultural resources" which are defined in Public Resources Code Section 21074 (a)(1)(A) and (B) as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe" and is:

1. Listed or eligible for listing in the California Register of Historic Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1 (k) or
2. A resource determined by the lead agency, in its discretion and supported by substantial evidence to be significant pursuant to criteria set forth in subdivision (c) of public resources code Section 5024.1. In applying these criteria, the Lead Agency shall consider the significance of the resource to a California Native American tribe.

AB 52 also establishes a formal consultation process for California tribes regarding the potential for non-exempt projects (resulting in a Negative Declaration or Environmental Impact Report) to impact tribal cultural resources.

The General Plan Integrated FEIR considered tribal cultural resources in the context of cultural resources and identified a less than significant impact to tribal cultural resources because implementation of General Plan policies and compliance with existing policies and programs would reduce impacts to unrecorded resources.

4.18.1.2 *Existing Conditions*

There has been no change in the existing conditions regarding Tribal Cultural Resources since adoption of the 2013 CAP.

4.18.2 Impact Discussion

	New Potentially Significant Impact	New Less than Significant with Mitigation Incorporated	New Less than Significant Impact	Same Impact as Approved Project	Less Impact than Approved Project
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:					

a)	Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?	☐	☐	☐	☒	☐
b)	A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☐	☒	☐

4.18.2.1 *Response*

The proposed 2022 CAP would involve implementation of policy actions designed to reduce GHG emissions citywide. Implementation of the proposed 2022 CAP would not change the land uses, areas of the City in which new development or redevelopment would occur, or allow development which would cause a substantial adverse change to a tribal cultural resource.

4.18.2.2 *Conclusions*

The proposed 2022 CAP would not result in any new or substantially more severe impacts to Tribal Cultural Resources. **(Same Impact as Approved Project)**

4.19 UTILITIES AND SERVICE SYSTEMS

4.19.1 Environmental Setting

4.19.1.1 *Regulatory Framework*

There have been no substantive changes to the regulatory framework for utilities and service systems.

4.19.1.2 *Existing Conditions*

Since adoption of the 2013 CAP, numerous development projects have been approved and constructed which have changed the utilities and service systems conditions in the city. These projects were required to undergo environmental review and comply with City policies and standards to avoid insufficient capacity to provide utilities services and ensure compliance with state and local standards.

4.19.2 Impact Discussion

	New Potentially Significant Impact	New Less than Significant with Mitigation Incorporated	New Less than Significant Impact	Same Impact as Approved Project	Less Impact than Approved Project
Would the project:					
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☐	☒	☐
b) Have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☐	☒	☐
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒	☐
d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☐	☒	☐

	New Potentially Significant Impact	New Less than Significant with Mitigation Incorporated	New Less than Significant Impact	Same Impact as Approved Project	Less Impact than Approved Project
Would the project:					
e) Be noncompliant with federal, state, or local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☒	☐

4.19.2.1 *Response*

Water Resources Actions

The 2022 CAP includes water conservation actions which may result in the extension of recycled water lines. The environmental effects of these actions are discussed throughout this Addendum and were determined to be less than significant with implementation of standard conditions of approval and compliance with existing General Plan policies and local, state, and federal regulations.

Other Actions

The proposed project would involve implementation actions which would reduce citywide GHG emissions to achieve state mandated reduction goals. Proposed actions would occur within existing buildings, and previously developed areas of the City and would not involve any changes to land use, housing, or jobs such that the city's service population would exceed levels previously identified and analyzed in the 2013 CAP Negative Declaration. For these reasons, the proposed 2022 CAP would result in the same impacts regarding water supply, wastewater treatment capacity and solid waste generation as previously identified in the General Plan FEIR and 2013 CAP Negative Declaration.

4.19.2.2 *Conclusions*

The proposed 2022 CAP would not result in any new or substantially more severe utilities and service system impacts than previously identified in the General Plan Final EIR and the 2013 CAP Negative Declaration. **(Same Impact as Approved Project)**

4.20 WILDFIRE

4.20.1 Environmental Setting

4.20.1.1 *Regulatory Framework*

Since certification of the General Plan FEIR, a set of amendments to the CEQA Guidelines were passed in 2018, requiring wildfire to be addressed as a separate section in the Appendix G checklist. Although questions related to wildfire hazard were previously discussed under Section 4.13, Hazards and Hazardous Materials, of the General Plan FEIR, additional questions were added in 2018 that were not previously addressed in the General Plan FEIR.

4.20.1.2 *Existing Conditions*

There are no changes in the environmental conditions with respect to wildfire.

4.20.2 Impact Discussion

	New Potentially Significant Impact	New Less than Significant with Mitigation Incorporated	New Less than Significant Impact	Same Impact as Approved Project	Less Impact than Approved Project
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, Would the project:					
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒	☐
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒	☐
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒	☐
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒	☐

4.20.2.1 *Response*

Although wildfire impacts were previously analyzed in Section 4.13 of the General Plan FEIR, this analysis did not address specific hazards associated with development within wildfire hazard zones. As noted in the General Plan FEIR, there are no wildfire hazard zones within the City of Santa Clara.[32] The proposed project would involve implementation actions which would reduce citywide GHG emissions to achieve state mandated reduction goals. Proposed actions would occur within existing buildings and previously developed areas of the City which are not located in or near state responsibility areas or lands classified as very high fire hazard severity zones. The project, therefore, would not result in any impact related to emergency response or evacuation, exposure of project occupants to pollutant concentrations from uncontrolled spread of wildfire, the installation of infrastructure to combat wildfire, or exposure of people or structures to risks of flooding or landslides resulting from post-fire runoff, slope instability, or drainage changes. For these reasons, the proposed project would not result in wildfire impacts substantially different from those previously identified in the General Plan FEIR.

4.20.2.2 *Conclusion*

The proposed 2022 CAP would not result in any new or substantially more severe wildfire impacts than previously identified in the General Plan FEIR and the 2013 CAP Negative Declaration. **(Same Impact as Approved Project)**

[32] City of Santa Clara. *Integrated Final Environmental Impact Report for the City of Santa Clara Draft 2010- 2035 General Plan Volume I, EIR Text.* January 2011.

SECTION 5.0 CONCLUSION

Based on the above analysis and discussion, no substantive revisions are needed to the General Plan FEIR (including the 2013 Negative Declaration), because no new significant impacts or impacts of substantially greater severity would result from the 2022 CAP project. There have been no changes in circumstance in the project area that would result in new significant environmental impacts or substantially more severe impacts, and no new information has come to light that would indicate the potential for new significant impacts or substantially more severe impacts than were discussed in the General Plan FEIR (including the 2013 Negative Declaration). Therefore, no further evaluation is required, and no Subsequent EIR is needed pursuant to State CEQA Guidelines Section 15162, and an EIR Addendum has therefore appropriately been prepared, pursuant to Section 15164.

Pursuant to CEQA Guidelines Section 15164(c), this Addendum need not be circulated for public review, but will be included in the public record file for the General Plan FEIR.

Andrew Crabtree
Director of Community Development

_____
Signature

_____
Date

SECTION 6.0 REFERENCES

The analysis in this Initial Study is based on the professional judgement and expertise of the environmental specialists preparing this document, based upon review of the site, surrounding conditions, site plans, and the following references:

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SECTION 7.0 LEAD AGENCY AND CONSULTANTS

7.1 LEAD AGENCY

City of Santa Clara
Department of Community Development, Planning Division
John Davidson, Principal Planner
Nimisha Agarwal, Associate Planner

7.2 CONSULTANTS

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Environmental Consultants and Planners
Shannon George, Principal Project Manager
Carolyn Neer, Project Manager
Ryan Osako, Graphic Artist

SECTION 8.0 ACRONYMS AND ABBREVIATIONS

AB	Assembly Bill
BAAQMD	Bay Area Air Quality Management District
2017 CAP	Bay Area 2017 Clean Air Plan
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CAP	Climate Action Plan
CIP	Climate Resilience Capital Improvements Program
EIR	Environmental Impact Report
EO S-3-05	Executive Order S-3-05
General Plan FEIR	2010-2035 General Plan Integrated Final Environmental Impact Report
GHG	greenhouse gas
IS	Initial Study
$MTCO_2e$	metric tons of CO_2e
$MMTCO_2e$	million metric tons of CO_2e
NOD	Notice of Determination
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SVP	Silicon Valley Power
TAC	Toxic air contaminants
TDM	Transportation Demand Management
USFWS	United States Fish and Wildlife Service
VMT	vehicle miles traveled