CHAPTER 1
CLIMATE CHANGE AND CUPERTINO

This chapter defines the purpose of the City's Climate Action Plan (CAP) and the planning framework used to develop it. An overview of the State of California's greenhouse gas (GHG) reduction efforts is introduced, along with a policy framework of existing statewide action. The chapter also presents a summary of ongoing local and regional efforts related to climate change planning. It concludes with a description of how the CAP relates to the City's General Plan and to the California Environmental Quality Act.

"No citizen of the global village is free from the damage caused by climate change. For the harmony between human settlements and nature, for the symbiosis of all groups of citizens, and for the happiness of both current and future generations, cities should think and act together."

Park Won Soon, Mayor, Seoul Metropolitan Government, Republic Of Korea; Chair, World Mayors Council on Climate Change

The City of Cupertino's Climate Action Plan is designed to be a blueprint of our community's response to the challenges posed by climate change, recognizing our responsibility as an emissions generator and as a guardian of our locality and all of its members. Aligned with our community's vision as defined in our General Plan, this document serves as a roadmap to ensure our long-term quality of life and vitality. Climate scientists around the world, represented by the Intergovernmental Panel on Climate Change, have presented an unequivocal position on this issue: human activity is changing the earth's climate through the release of greenhouse gas (GHG) emissions resulting from the combustion of fossil fuels. The longer communities delay in taking action, the greater the risk humans will face of irreversibly depleting nonrenewable resources and harming the environment. However, it is conceivable, and increasingly foreseeable, that humans will delay action so long that useful policy and programs will not be able to effectively prevent permanent, and possibly catastrophic, damage to our planet and all of its inhabitants.

> *"Someday, our children, and our children's children, will look at us in the eye and they'll ask us, did we do all that we could when we had the chance to deal with this problem and leave them a cleaner, safer, more stable world?"*
>
> – President Barack Obama's Climate Speech, June 25, 2013

According to most climatologists, the planet is starting to experience shifts in climate patterns and increased frequency of extreme weather events at both the global and local levels. At a statewide level, these impacts include reduced snow pack in the Sierra Nevada affecting California water supplies; rising sea levels threatening cities along the coast, San Francisco Bay, and the state's rivers; decreasing air quality affecting public health; and, rising temperatures impacting the state's agricultural industry. Local communities represent the epicenter of these impacts where the "rubber hits the road," revealing new vulnerabilities that will require cohesive disaster planning, emergency response, and community capacity-building to minimize the social, economic, and environmental challenges arising through this new climate reality. This Climate Action Plan represents our community's efforts to achieve these aims.

CALIFORNIA'S COMMITMENT TO CLIMATE PROTECTION

California has long been a sustainability leader, as illustrated by Governor Schwarzenegger signing Executive Order (EO) S-3-05 dating back to 2005. EO S-3-05 recognizes California's vulnerability to a reduced snowpack, exacerbation of air quality problems, and potential sea level rise due to a changing climate. Figure 1.1 illustrates several primary climate change impacts that state departments are currently tracking in California.

Figure 1.1 – Climate Change in California

Source: http://oehha.ca.gov/multimedia/epic/images/2013infographic.gif

To address these concerns, the Governor established the following targets to reduce statewide GHG emissions:

- 2000 levels by 2010,
- 1990 levels by 2020, and
- 80% below 1990 levels by 2050

In 2006, California became the first state in the country to adopt a statewide GHG reduction target through Assembly Bill (AB) 32. This law codifies the EO S-3-05 requirement to reduce statewide emissions to 1990 levels by 2020. AB 32 also resulted in the 2008 adoption by the California Air Resources Board (ARB) of a *Climate Change Scoping Plan* (Scoping Plan), outlining the state's plan to achieve emission reductions through a mixture of direct regulations, alternative compliance mechanisms, different types of incentives, voluntary actions, market based mechanisms, and funding.

The Scoping Plan also recommends that local governments reduce municipal operation emissions to a level approximately 15% below baseline levels by 2020 to assist in achieving the statewide 2020 reduction target (i.e., a return to 1990 levels). Recent guidance from the State Office of Planning and Research further recommends that local governments plan to reduce their emissions on a trajectory that would contribute to the state's long-term 2050 target expressed in EO-S-3-05 (i.e., 80% below 1990 levels). See Chapter 2 for further discussion on the CAP's target setting rationale.

CUPERTINO'S COMMITMENT TO CLIMATE PROTECTION

The City of Cupertino has long been a leader in practicing resource conservation and efficiency, and formalized its efforts in 2008 through the creation of an Environmental Affairs Division (now called Sustainability Division) within the Office of the City Manager as the team dedicated to designing and implementing the energy, water, and transportation scope set forth in the City's General Plan In 2012, the City chose to partner with other local governments in Santa Clara County to jointly develop climate action plans that address emissions from community-wide and municipal operations sources, an outstanding policy objective defined in the General Plan Sustainability Element.

As the majority of GHG emissions arise from communities, local governments must play a vital role in their mitigation, but the City of Cupertino cannot solve the climate crisis alone. Together with its partners in county, state, and federal government, Cupertino has committed to taking steps to reduce its emissions, and create new programs and services that will support the community and its families to do the same. This CAP offers ways to make Cupertino's homes more energy efficient and increase the amount of locally produced renewable energy. It supports development patterns envisioned in the City's General Plan that emphasize vibrant complete neighborhoods, which allow people to perform daily activities on foot, by bicycle, or via public transportation. It provides transit solutions to further improve this mobility within the community. It offers ways to conserve resources and reduce waste sent to area landfills. Lastly,

it identifies specific actions the City can take to reduce emissions generated from government activities while still providing an exceptional level of service to its residents and businesses.

The strategies presented in this CAP build from the commitment of Cupertino's residents, local businesses, and City government to take actions that will improve the community's quality of life, while also reducing Cupertino's greenhouse gas emissions. By collaborating with individuals and community groups to take these steps toward minimizing our climate change contribution, our City can achieve a common vision for community longevity and environmental vitality, and to reduce our vulnerabilities to current and predicted climate impacts.

Purpose of a Climate Action Plan

At its basic level, climate action planning seeks to identify emissions reduction strategies that are informed by the goals, values, and priorities of our community. CAPs prepared in California also typically developed as a roadmap for cities to contribute to the state's climate protection efforts, recognizing that our communities are the population and business centers that use resources and generate emissions. California's CAPs also define steps to comply with applicable local Air Quality Management Districts' efficiency standards for GHG emissions.

The City of Cupertino, along with climate-committed individuals and interested community groups, partnered with Santa Clara County Office of Sustainability and the Pacific Gas and Electric Company (PG&E), to develop this CAP as part of a regional effort to support Santa Clara County governments in achieving the following five objectives:

- **To demonstrate environmental leadership** – Cupertino as a community can rise to the difficult challenge of reducing the impact of climate change by defining measurable, reportable, verifiable climate actions to reduce its contribution to local and global GHG emissions that can serve as a model for small cities in the state and nationwide.
- **To save money and promote green jobs** – Residents, businesses, and government can reduce their utility costs through increased energy and water efficiency, and a focus

on efficiency can create job opportunities within the community that contribute to protecting our shared environmental resources.

- **To comply with the letter and spirit of state environmental initiatives** – California is taking the lead in tackling climate change while driving new energy markets and fostering new environmental services. As coordination with cities serves as the keystone to achieving statewide greenhouse gas emissions reductions, Cupertino has a responsibility to help the state access emissions sources that arise in our geography and meet its goals to reduce these emissions.
- **To promote sustainable development** – By developing this Climate Action Plan to reinforce General Plan policies and align with the Bay Area Air Quality Management District (BAAQMD) guidelines, a new class of sustainable development projects, such as mixed use and transit oriented developments, can be fast-tracked (i.e., "streamlined") through the California Environmental Quality Act (CEQA) review process by not requiring GHG emissions for proposed projects consistent with the CAP.
- **To support regional climate change efforts** – Cupertino developed its CAP through a county-wide effort that established consistency in the local response to the climate change issue, and created a framework to collaborate regionally on implementation of different CAP programs. This partnership elevates the credibility of local climate action planning by allowing transparency, accountability, and comparability of the plans' actions, performance, and commitments across all participating jurisdictions.

CITY'S COMMITMENT TO EFFECTIVE OPERATIONS AND SERVICE DELIVERY

In addition to its community-wide commitment to climate protection, the City is dedicated to providing services, programs, and facilities in a fiscally responsible manner. The City has already made numerous investments that promote efficient resource use, reduce operation and maintenance costs, reduce risks to future cost uncertainty, and strengthen long-term resilience.

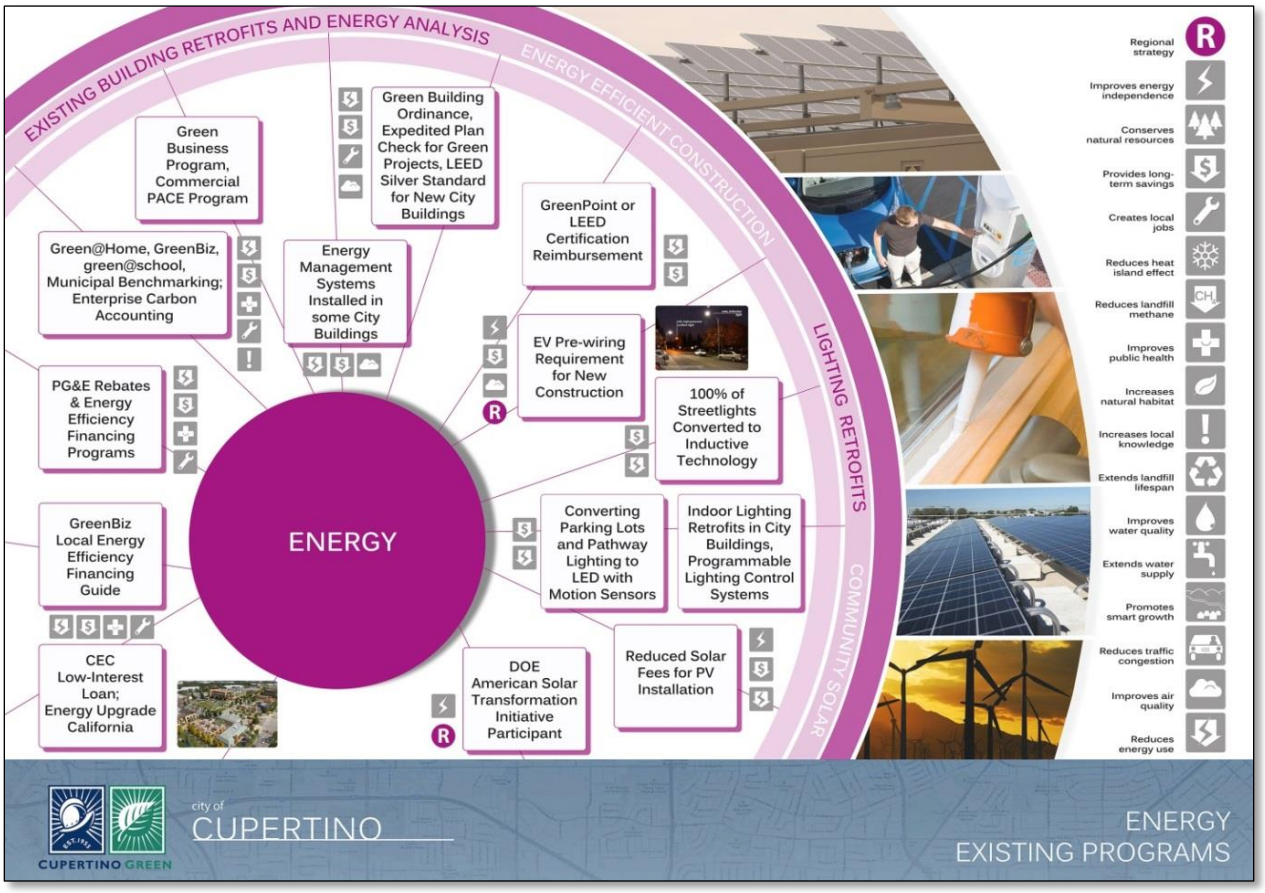
Examples of past initiatives include:

- Retrofitted all City-owned and operated street light fixtures with energy and cost-efficient lighting technologies.
- Replaced irrigation controllers with "smart" weather-based controllers to improve landscaping water conservation, coupled with the application of drought-tolerant landscaping where applicable.

- Replaced all City-owned traffic signals with energy-efficient technologies that also reduce maintenance costs.
- Retrofitted facility parking lot and park pathway lighting with LED technology.
- Upgraded interior lighting to LEDs and T8s, exit signs to LEDs, and office/workstation to ENERGY STAR and EPEAT-certified electronic equipment.
- Adopted a Green Building Ordinance, Water Efficient Landscaping Ordinance, Electric Vehicle Charging System Pre-Wiring Requirement that applies to new and retrofitted City, commercial, and residential buildings.
- Benchmarked energy use in all municipal facilities through ENERGY STAR Portfolio Manager.
- Enrolled and certified all municipal facilities in the California statewide Green Business Program to benchmark and periodically inventoried operational sustainability practices in the areas of energy, water, materials, storm water, health and wellness, and hazardous materials.
- Expanded this comprehensive sustainability-focused, behavior change-driven program to support emissions reduction and resource efficiency cost-savings gains in small to mid-sized businesses (i.e., GreenBiz Cupertino), residents (i.e., Green@Home and the Do-It-Yourself Green@Home Toolkit), and schools (i.e., green@school).
- Incorporated Plug-In-Electric hybrid and fuel-efficient vehicles into the City fleet, prioritized through lifecycle cost assessments as directed by the City's Environmentally Preferable Procurement Policy, and electric vehicle charging stations for municipal and community use.
- Expanded composting services, available to all residents and businesses, beyond municipal facilities into parks to ensure the City is further reducing its landfill contribution.

Figure 1.2 shows an informational poster used during the CAP's public workshop open houses to highlight past City successes in energy conservation and renewable energy development, including several other energy programs launched by the City.

Figure 1.2 – City of Cupertino Existing Energy Programs



Beyond utility-focused efficiencies, which serve as the basis for the City's past, present, and future climate-related objectives detailed in this report, it should also be noted that Cupertino operates under a "lean" government model. This enables the agency, and its taxpayers, to achieve dramatic cost efficiencies through many shared-service provisions, which also serve to reduce its operational emissions. For example, the City contracts with Los Gatos for street-sweeping services, reducing its purchase of this specialized vehicle, and with the County for police and fire services to leverage their public safety-related expertise and equipment. The City is also evaluating opportunities to outsource services itself, including sign and banner printing and sustainability services, identified as two unique city assets relevant to smaller adjacent jurisdictions. Through this shared service model, the City is reducing the agency's demand for additional equipment (e.g., vehicles) and staffing, and associated resources and emissions, a goal that will continue to be considered and prioritized through implementation of the CAP.

Components of a CAP

A CAP is a tool that many cities in California are using to quantify their share of statewide GHG emissions and establish action steps toward achieving a local emissions reduction target. A CAP provides a set of strategies intended to guide community efforts to reduce GHG emissions, typically through a combination of statewide and local actions. CAPs can be developed to address community-wide emissions (i.e., total emissions within a jurisdictional boundary) and/or municipal government emissions (i.e., emissions resulting from the provision of government services). As described in the Executive Summary, Cupertino has prepared its CAP to address the climate change issue from both the community-wide and municipal operations perspectives.

To facilitate local governments' climate protection efforts, California's Air Resources Board prepared the Local Government Operations Protocol (LGOP). The LGOP reporting protocol provides guidance on how to inventory greenhouse gas emissions resulting from government buildings and facilities, government fleet vehicles, wastewater treatment and potable water treatment facilities, landfill facilities, and other operations and services.[i] Local governments are also encouraged to use the LGOP to conduct inventories and prepare a report of GHG emissions compared to a baseline so that achieved reductions can be tracked in a transparent, consistent, and accurate manner. Additionally, the organization ICLEI, Local Governments for Sustainability, provides guidance on how local governments can address environmental impacts from a community-wide perspective, based upon a recently released U.S. Community Protocol for Accounting and Reporting of Greenhouse Gas Emissions. The City's CAP was developed in conformance with the technical guidance provided within the LGOP as well as climate change

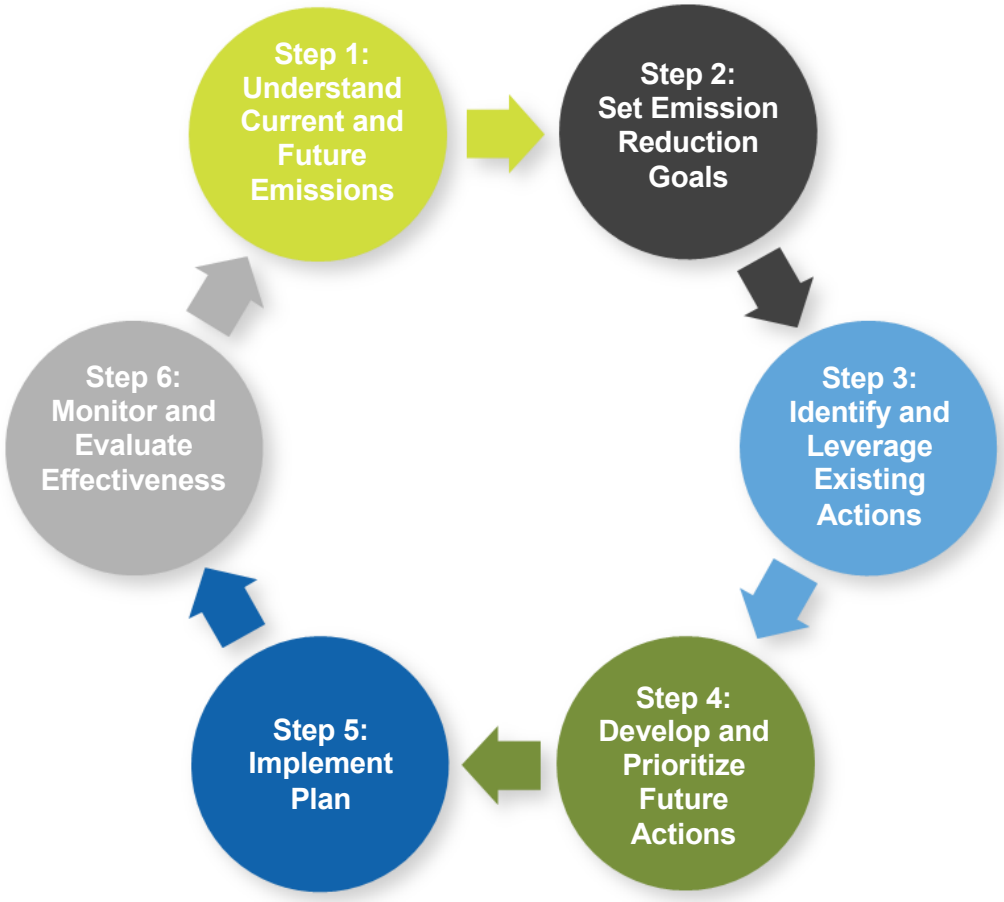
planning guidance from other agencies, including BAAQMD, the United Nations International Panel on Climate Change, and the Climate Change Action Registry.

Like other California communities, the City's CAP development framework was modeled after ICLEI's universally-applied Five Milestones for Climate Mitigation, which includes the following steps:

1. Conduct a baseline emissions inventory and forecast
2. Adopt an emissions reduction target for the forecast year
3. Develop a Local Climate Action Plan
4. Implement policies and measures
5. Monitor and verify results

This 5-step approach was modified for this CAP to split Step 3 into two distinct steps in which the full breadth of Cupertino's past actions and progress on emissions reduction could be evaluated, quantified, and then expanded. Figure 1.3 illustrates this six-step process used to guide Cupertino's CAP development.

Figure 1.3 – CAP Development Process



This CAP evaluated community-wide and municipal operations GHG emission inventories and forecasts to establish a starting point and probable future emissions levels if no action to reduce emissions is taken (Step 1). Reduction targets were then defined to provide aspirational goals for improvement (Step 2). Emission reduction measures and implementation actions were written to help the City achieve its reduction targets (Step 3). Upon adoption of the CAP, the City will take action to implement its reduction measures (Step 4), monitor progress towards achievement of its reduction targets (Step 5), and evaluate effectiveness, celebrate successes, and use monitoring results to make adjustments to improve performance of CAP measures in the future (Step 6).

This CAP represents Cupertino's progress on Steps 1-3, though the agency has already launched a variety of programs to implement emissions reductions (Step 4) throughout the community by implementing its General Plan Sustainability Element; these initiatives are described more fully in Chapter 3. The following discussion provides further detail on each step of the CAP development process.

STEP 1. UNDERSTAND CURRENT AND FUTURE EMISSIONS

Understanding the source and scale of greenhouse gas emissions and the underlying emission-generating activities is a critical element for any climate action planning process. The City's 2010 baseline GHG emissions inventory and future year emissions forecasts for 2020, 2035, and 2050 identify the amount of emissions generated by each sector (e.g., energy/facilities, transportation/vehicle fleet, potable water, solid waste) and relevant subsectors. This information, described in detail within Chapter 2, identifies both the challenges and opportunities facing the City in mitigating its emissions, and will assist the City Council to select appropriate actions to reduce emissions. It also forms the basis for setting emission reduction targets and strategies for future years. As previously mentioned, Cupertino has prepared emissions inventories and forecasts at the community-wide and municipal operations levels.

STEP 2. SET EMISSION REDUCTION GOALS

Statewide guidance recommends that local governments adopt emissions reduction targets that support the state's efforts towards its 2050 target. As described earlier, the state has adopted reduction targets that would return statewide emissions to 1990 levels by 2020 and to 80% below 1990 levels by 2050. The state is also encouraging local governments to adopt similar targets through locally-developed climate action plans to contribute to these statewide efforts.

In order to do its part and continue to lead by example, the City has developed reduction targets based on its 2010 baseline emissions inventory, which mirror the efforts at the state level. Per guidance included in the *2008 Scoping Plan*, the City established a near-term target of 15% below baseline levels by 2020, which is meant to approximate a return to 1990 emissions levels. This goal was then extrapolated to 2050 in order to mirror the state's goal for 80% below 1990 levels, which results in a City goal of 83% below 2010 levels by 2050. A 2035 goal of 49%

below 2010 levels was also identified to serve as a mid-point check-in between these near-term and long-term goals. The CAP uses these same targets to evaluate the community-wide and municipal operations reduction strategies.

These targets were presented to the public in the context of the community-wide CAP during community workshops and at Planning Commission and City Council study sessions as part of the consideration for developing appropriate local emissions reduction measures. While some community members expressed a desire to adopt more stringent targets, the majority of participants were more comfortable selecting these targets, which more closely align with statewide efforts and those of neighboring jurisdictions. See Chapter 2 for further description of the target setting process.

Step 3. Identify and Leverage Existing Actions

Greenhouse gas mitigation within local governments is most effective when a city can use existing efforts as a foundation on which to build additional future initiatives. During the development of the CAP, the City identified a wide range of actions that it has already taken to encourage community-wide energy and water conservation, reduce municipal energy and water use, support installation of renewable energy systems, improve vehicle efficiency in the municipal fleet, support alternative vehicle use community-wide, and divert organic waste to reduce landfill emissions. While the purpose of the CAP is to identify and define new actions, the momentum from these existing actions provides a platform to launch additional emissions mitigation in the future. Discussion of existing communitywide and municipal operations efforts is provided within Chapter 3 and 4, respectively, where relevant to the implementation of future action.

Step 4. Develop and Prioritize Future Actions

Future greenhouse gas emissions reduction actions need to be feasible, effective, and compatible with other City objectives. A review of best practices from other leading jurisdictions nationally and internationally was conducted to develop the actions contained within the CAP. City staff preliminarily reviewed these best practices and identified strategies that are compatible with community goals and City Council and other organizational priorities. Once the preliminary list of measures was identified, draft actions and implementation steps were developed that could be used to implement these measures by 2020. Emissions reduction estimates were then developed from the list of measures. This information was shared with the community and elected officials who provided guidance on the final list of CAP strategies and implementation steps, and helped to prioritize the early action items for CAP implementation. This measure development process is illustrated in Figure 1.4.

Figure 1.4 – Measure Development Process

Step 5. Implement Plan

The CAP directs a wide variety of actions to be implemented. Each action identifies specific implementation steps, responsible parties, a timeline for completion, and recommended performance indicators. Some of the actions can be directly executed by City staff or community members, while other actions will require additional research, refinement, development, and coordination in order to achieve the desired outcomes.

Step 6. Monitor and Evaluate Effectiveness

Although climate action planning is still relatively new in California, a key step in the planning process is to monitor and evaluate the effectiveness of a plan and its actions. Effectiveness can be defined in terms of:

- Overall and sector-level emissions as demonstrated by periodic inventories
- Progress toward performance targets defined for each action
- Reduction in City energy, fuel, and related operations and maintenance costs

Chapter 7 concludes the CAP by defining a framework and schedule for monitoring and evaluating CAP effectiveness and updating the document in the future.

Climate Change Science

According to the US Environmental Protection Agency, global warming refers to the recent and ongoing rise in global average temperature near Earth's surface, and is caused primarily by increasing concentrations of greenhouse gases in the atmosphere. Global warming is causing climate patterns to change. However, global warming itself represents only one aspect of climate change. Climate change refers to any significant change in the measures of climate lasting for an extended period of time, including major changes in temperature, precipitation, or wind patterns, among other effects, that occur over several decades or longer.[ii]

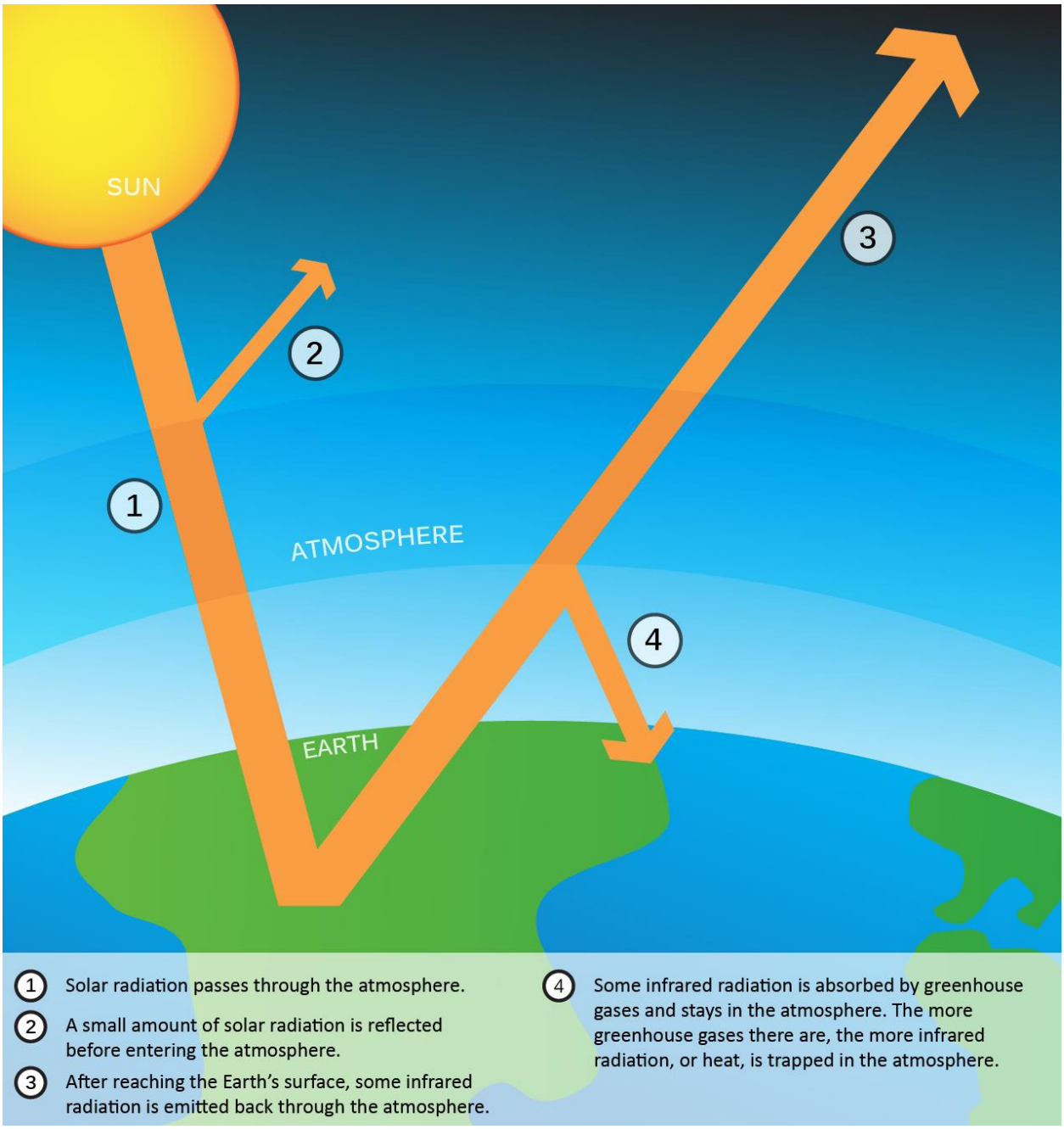
Over the past century, human activities have released large amounts of carbon dioxide and other greenhouse gases into the atmosphere. Greenhouse gases act like a blanket around Earth, trapping energy from the sun in the atmosphere and causing it to warm. This phenomenon is called the greenhouse effect and is natural and necessary to support life on Earth (see Figure 1.5, next page). Many greenhouse gases are also naturally occurring. However, the buildup of greenhouse gases from human activities and resulting global average temperature rise can change Earth's climate and result in dangerous effects to human health and welfare and to ecosystems.[iii]

> *"Increasingly intense droughts in California, all of the Southwest, and even into the Midwest have everything to do with human-made climate change."*
>
> – Dr. James Hansen

In the United States, 83.6% of GHG emissions are from CO_2, with 94.4% of CO_2 emissions coming from the burning of fossil fuels.[iv] Trend projections indicate that atmospheric concentrations of GHG emissions will continue to increase throughout this century. If these projections become reality, climate change will threaten our economic well-being, public health, and environment.

California has an advantage in its scientific understanding of climate change, which stems from public investment into climate research and publications. Much of this research is performed through the California Climate Change Research Center created by the California Energy Commission in 2003 as the first state-funded climate change research program in the country (see: http://energy.ca.gov/research/environmental/climate.html). This research has provided a solid body of vital data, which is available to assist state and local leaders to better understand how climate change is affecting us now, what is in store ahead, and what we can do about it. State-sponsored research has contributed greatly to recent advances in our understanding of the potential impacts of climate change on California. A first assessment prepared by the California Climate Change Center and published in 2006, made clear that the level of impacts is a function of global emissions of greenhouse gases and that lower emissions can significantly reduce those impacts.[v]

Figure 1.5 – Greenhouse Effect



Source: AECOM 2014

The third and most recent publication, *The 2012 Vulnerability and Adaptation Study,* explores local and statewide vulnerabilities to climate change, highlighting opportunities for taking concrete actions to reduce climate change impacts.[vi] The California legislature passed legislation (discussed below in the section *State Climate Change Actions*) based upon the findings of the most comprehensive, advanced, and thoroughly reviewed documents on the science of climate change. The development of CAPs in California, including those in Santa

Clara County, is based upon the actions of the California legislature and its reliance on these findings. For further information on climate science generated for our state, please visit the California Climate Change Portal at http://www.climatechange.ca.gov/.

BENEFITS OF ADDRESSING GHG EMISSIONS

Planning efforts intended to reduce GHG emissions through resource efficiency and conservation measures often have multiple benefits that will improve the local quality of life, help the community adapt to future impacts of climate change, support local economic development, and demonstrate local sustainability leadership. While some of these "co-benefits" (i.e., achieving multiple ends) are qualitative, others are quantifiable improvements over current conditions. This plan generally refers to co-benefits as the additional, yet interconnected, benefits resulting from implementation of various CAP measures. Figure 1.6 presents icons that illustrate the co-benefits discussed during the CAP's public outreach activities, though this list is in no way exhaustive.

Figure 1.6 – CAP Measure Co-Benefits

State Climate Change Actions

Cupertino's strategy for climate protection must be set within the context of the Bay Area and the state, where much of the momentum for local action in the United States originates. As mentioned above, California's climate-related actions were codified in AB 32, the California Global Warming Solutions Act of 2006. In addition to codifying the state's 2020 reduction target as originally envisioned in EO-S-3-05 (i.e., return to 1990 levels by 2020), AB 32 engendered several companion laws that can assist local communities, such as Cupertino, in reducing their community-wide GHG emissions. These legislative actions and regulations are referred to as statewide actions throughout the CAP, and represent a significant source of estimated GHG reductions.

This CAP estimated the GHG emission reductions associated with:

- the Renewable Portfolio Standard (RPS)
- California 2013 Building Energy Efficiency Standards
- AB 1109 – Lighting Efficiency
- AB 1493 – Pavley I and II
- EO-S-1-07 – Low Carbon Fuel Standard
- Vehicle Efficiency Regulations

As the regulatory framework surrounding AB 32 grows, it may be possible to evaluate a wider range of statewide reductions sources in the future. The following section presents an overview of each of these statewide actions included in the CAP. Chapter 2 provides additional information on how these actions relate to achievement of the community-wide and municipal operations targets.

Renewable Portfolio Standard

Senate Bill (SB) 1078, SB 107, EO-S-14-08, and SB X1-2 establish increasingly stringent RPS requirements for California utilities. RPS-eligible energy sources include wind, solar, geothermal, biomass, and small-scale hydro.

- **SB 1078** requires investor-owned utilities to provide at least 20% of their electricity from renewable resources by 2020.
- **SB 107** accelerated the SB 1078 the timeframe to take effect in 2010.
- **EO-S-14-08** increased the RPS further to 33% by 2020. PG&E, Cupertino's electricity provider, delivered 23.8% of its electricity from eligible renewable sources in 2013.
- **SB X1-2** codified the 33% RPS requirement established by EO-S-14-08.

2013 Building Energy Efficiency Standards

California's Building Standards Code (California Code of Regulations Title 24) dictates how new buildings and major remodels are constructed in California. The Building Energy Efficiency Standards (Title 24, Part 6), are a subset of the state building code, which detail energy efficiency standards for residential and non-residential development. The standards are updated on an approximately three-year cycle. The state has further increased building energy conservation requirements through adoption of the 2013 standards, which went into effect July 1, 2014. It is estimated that these revisions to the current 2008 Building Energy Efficiency Standards will result in energy consumption reductions of 15-25% over the previous standards.

The California Green Building Standards Code (California Code of Regulations Title 24, Part 11) includes additional requirements for new construction and renovation projects that may also result in emissions reductions. This plan does not include these reductions as a separate measure. However, the impact of these requirements may be accounted for in other statewide or local reduction measures (e.g., construction and demolition waste diversion requirements).

Net Zero Energy New Buildings

In the 2007 Integrated Energy Policy Report, the CEC adopted a goal to achieve net zero energy buildings in new residential construction by 2020 and non-residential construction by 2030. A net zero energy building consumes only as much energy on an annual basis as can be generated with an on-site renewable energy system (e.g., solar, wind, geothermal). While the pathway to realize this goal has not yet been defined, this goal will play a role in the future ability to achieve the state's long-term reduction target. Future reduction estimates associated with this goal may be quantifiable once an implementation pathway for this policy has been identified.

AB 1109 – Lighting Efficiency

AB 1109 was signed into law in 2007. The California Lighting Efficiency and Toxics Reduction Act requires the California Energy Commission to adopt energy efficiency standards for all general purpose lights, reducing lighting energy usage in indoor residences and state facilities by no less than 50%, by 2018, as well as require a 25% reduction in commercial facilities by that same date. To achieve these efficiency levels, the California Energy Commission applied its existing appliance efficiency standards to include lighting products, as well as required minimum lumen/watt standards for different categories of lighting products. In addition, the bill prohibits the manufacturing for sale or the sale of certain general purpose lights that contain hazardous substances.

AB 1493 – Pavley I and II

AB 1493, California's mobile-source GHG emissions regulations for passenger vehicles, or California Clean Car Standards, was signed into law in 2002. AB 1493 requires ARB to develop and adopt regulations that reduce GHG emissions from passenger vehicles, light-duty trucks,

and other non-commercial vehicles for personal transportation. In 2004, ARB approved amendments to the California Code of Regulations adding GHG emissions standards to California's existing standards for motor vehicle emissions.

EO-S-1-07 – Low Carbon Fuel Standard

EO-S-01-07 reduces the carbon intensity of California's transportation fuels by at least 10% by 2020. The Low Carbon Fuel Standard (LCFS) is a performance standard with flexible compliance mechanisms that incentivizes the development of a diverse set of clean, low-carbon transportation fuel options to reduce GHG emissions.

Vehicle Efficiency Regulations

ARB has adopted several additional regulations to reduce emissions through improved vehicle efficiency that will have local GHG emission reduction benefits in Cupertino. The following six regulations were quantified and included as part of this CAP, assuming their ongoing or future implementation, as appropriate.

Tire Inflation Regulation

On September 1, 2010, ARB's Tire Pressure Regulation took effect. The purpose of this regulation is to reduce GHG emissions from vehicles operating with under-inflated tires by inflating them to the recommended tire pressure rating. The regulation applies to vehicles with a gross vehicle weight rating (GVWR) of 10,000 pounds or less. Under this regulation, automotive service providers must meet the following requirements:

- Check and inflate each vehicle's tires to the recommended tire pressure rating, with air or nitrogen, as appropriate, at the time of performing any automotive maintenance or repair service.
- Indicate on the vehicle service invoice that a tire inflation service was completed and the tire pressure measurements after the service were performed.
- Perform the tire pressure service using a tire pressure gauge with a total permissible error no greater than + two (2) pounds per square inch (psi).
- Have access to a tire inflation reference that is current within three years of publication.
- Keep a copy of the service invoice for a minimum of three years, and make the vehicle service invoice available to the ARB, or its authorized representative upon request.

Tire Tread Program

This measure increases vehicle efficiency by creating an energy efficiency standard for automobile tires to reduce rolling resistance. A reduction in GHG emissions results from reduced fuel use. ARB staff estimates that reducing the rolling resistance of tires by 10% results in a 2% increase in fuel efficiency.

Low Friction Engine Oils

This measure increases vehicle efficiency by mandating the use of engine oils that meet certain low friction specifications. The American Petroleum Institute has established "energy conserving designation" for certain oils. These specifications will be used as a starting point for the mandated oils under this measure.

Solar Reflective Automotive Paint and Window Glazing

This measure increases vehicle efficiency by reducing the engine load for cooling the passenger compartment with air conditioning. The use of solar reflective automotive paints and window glazing reduces heating of the automobile passenger compartment from the sun resulting in reduced air conditioning use. The result is both less frequent air conditioning use by drivers and smaller air conditioners specified by manufacturers for new vehicles.

Heavy-Duty Vehicle GHG Emission Reduction (Aerodynamic Efficiency)

This regulation requires existing trucks/trailers to be retrofitted with the best available technology and/or ARB-approved technology to increase vehicle aerodynamics and fuel efficiency that will result in GHG reductions. This measure was identified as a Discrete Early Action in the Scoping Plan, and became enforceable beginning in 2010. Technologies that reduce GHG emissions and improve the fuel efficiency of trucks may include devices that reduce aerodynamic drag and rolling resistance. These requirements apply to both California-registered trucks and out-of-state registered trucks that travel to California.

Medium- and Heavy-Duty Vehicle Hybridization

This measure regulates or incentivizes GHG reductions from medium- and heavy-duty vehicles used in vocational applications such as parcel delivery trucks, garbage trucks, utility trucks, and transit buses. Hybrid electric technology has potential to significantly reduce GHG emissions and improve vehicle efficiency from these vehicles.

Regional Coordination and Actions

In addition to the Scoping Plan and other actions taken at the statewide level, numerous county-wide and other regional efforts have been established to support broad action towards emissions reductions within the Bay Area. The following regional efforts promoting GHG reductions are already in progress:

SANTA CLARA COUNTY-SPECIFIC:

- **Silicon Valley 2.0** – Led by the Santa Clara County office of sustainability, the Silicon Valley 2.0 project includes development of long-term strategies that support climate change mitigation and adaptation within the greater Silicon Valley region. The project aims to identify likely climate change impacts that would negatively affect the economic

vitality of the region or endanger its residents. This CAP was prepared as part of the Silicon Valley 2.0 mitigation strategy, which included regional collaboration on the development of community-wide and municipal operations CAPs for seven participating jurisdictions. The broader adaptation strategy considered local impacts to various facilities (e.g., vehicle infrastructure, buildings, utilities) within the region resulting from several climate risks (e.g., rising sea level, riverine flooding, heat waves).

- **Silicon Valley Energy Watch** – This program is a local government partnership between the City of San José, PG&E, and Ecology Action, to promote energy efficiency in municipal and non-profit buildings in Santa Clara County. Cupertino was the only municipality to receive funding for its GreenBiz and green@schools programs through SVEW's Community Energy Champions Grant program from 2011 to 2014.
- **Energy Upgrade California in Santa Clara County –** This Santa Clara County program aims to help residential consumers make improvements to their homes so they will use less energy, conserve water and other natural resources, and become healthier and more comfortable. The program connects homeowners with participating contractors who can help plan and complete energy efficiency projects and take advantage of rebates. Energy Upgrade California is a partnership among California counties, cities, non-profit organizations, and the state's investor-owned utilities (e.g., PG&E).
- **Congestion Management Agency –** VTA serves as the Congestion Management Agency for Santa Clara County to identify strategies to respond to future transportation needs, develop procedures to alleviate and control congestion, and promote county-wide transportation solutions (i.e., Transit 511).
- **Santa Clara Valley Water District –** The Santa Clara Valley Water District (SCVWD) is the primary water resource agency for Santa Clara County. As such, SCVWD is responsible for long-term water supply planning for the region and has taken steps in response to California's recent drought conditions. Its Board of Directors passed a resolution calling for mandatory measures to reach a water use reduction target equal to 20% of 2013 water use levels. SCVWD also provides rebates to encourage county residents to conserve water in their homes and landscapes. The District provides rebates for landscape conversions to low-water designs, irrigation hardware updates, graywater-to-landscape systems, high-efficiency toilets and clothes washers, and multi-family property submeter installation.

BAY AREA-FOCUSED:

- **Sustainable Communities Strategy/Regional Transportation Plan –** Local governments and regional agencies collaborated to develop a Sustainable Communities Strategy (SCS) in compliance with the requirements of SB 375, titled Plan Bay Area. This long-range integrated transportation and land-use/housing strategy for the Bay Area entirety, was approved by the Association of Bay Area Governments and Metropolitan Transportation Commission in 2013. Plan Bay Area defines the nine-county region's

SCS to accommodate future population growth and reduce emissions from cars and light trucks including initiatives to expand housing and transportation choices, create healthier communities and build a stronger regional economy. The aim of the forthcoming Santa Clara County-focused SCS is to better integrate land use with public transportation in order to reduce GHG emissions within our County specifically.

- **Joint Venture: Silicon Valley Network –** Established in 1993, Joint Venture: Silicon Valley Network provides analysis and action on issues affecting the local economy and quality of life. The organization brings together established and emerging leaders – from business, government, academia, labor, and the broader community – to spotlight issues and work toward innovative solutions. Joint Venture is dedicated to promoting climate-friendly activities that help the local economy and improve quality of life in Silicon Valley, as is realized through its Climate Prosperity Council and Public Sector Climate Task Force, through which Cupertino collaboratively procured its first solar project.
- **Silicon Valley Leadership Group Bay Area Climate Change Compact –** Silicon Valley Leadership Group (SVLG) is an organization consisting of principal officers and senior managers of member companies to work cooperatively with local, regional, state, and federal government officials to address major public policy issues affecting the economic health and quality of life in Silicon Valley. In 2009, SVLG organized the Bay Area Climate Change Compact, which establishes a framework for regional cooperation and setting aggressive goals for reducing greenhouse gas emissions. Cupertino has teamed with SVLG to pursue regional opportunities to procure electric vehicles and charging stations and recently received a "Red Tape to Red Carpet Award" in the category of Sustainable Green Development for its GreenBiz Program.
- **Bay Regional Energy Network –** BayREN is a collaboration of the 9 counties that make up the San Francisco Bay Area. Led by the Association of Bay Area Governments (ABAG), BayREN implements effective energy saving programs on a regional level and draws on the expertise, experience, and proven track record of Bay Area local governments to develop and administer successful climate, resource, and sustainability programs. BayREN is funded by California utility ratepayers under the auspices of the California Public Utilities Commission. One of only two Regional Energy Networks in the state, BayREN represents 20 percent of the state's population.
- **Sustainable Silicon Valley –** In 2004, Sustainable Silicon Valley (SSV) organized a regional voluntary initiative, setting a visionary target of reducing carbon dioxide (CO_2) emissions by 20% below the region's 1990 levels by the year 2010. SSV partners participating in the voluntary CO_2 emissions reduction program determined their own baseline year and a CO_2 percentage reduction goal to reach by 2010. Each pledging partner develops tactics to reach their targets. Options varied from improvements in equipment efficiency to energy conservation, the use of renewable energy sources, and purchase of green power and/or promotion of alternative commute options.

- **City/County Association of Governments of San Mateo County –** The City/County Association of Governments (C/CAG) is a council of governments consisting of the County of San Mateo and its 20 cities. The organization works on topics such as transportation, air quality, stormwater runoff, hazardous waste, solid waste and recycling, land use near airports, abandoned vehicle abatement, and issues that affect quality of life in general. Cupertino partnered with C/CAG through its Regionally Integrated Climate Action Plan Suite (RICAPS) process to develop a cursory Climate Action Plan that provided background information for this document.
- **Joint Policy Committee Bay Area Climate & Energy Resilience Project** – The Bay Area Climate & Energy Resilience Project (BACERP) is a collaborative of more than 100 public, private, and non-profit stakeholders in the nine-county San Francisco Bay Area. The primary purpose of the project is to support and enhance the local climate adaptation efforts of cities, counties, and other organizations. BACERP is focused on specific actions that will help all Bay Area stakeholders to move forward in a more efficient and powerful manner.
- **Sierra Club, Loma Prieta Chapter, Local Government Climate Action Survey** – A report released in 2014 detailing the climate leadership of communities located in Santa Clara and San Mateo Counties to increase awareness of the environmental efforts of local governments in the region, facilitate the exchange of best climate action practices, and advocate for more decisive action worthy of the magnitude of climate change.
- **PG&E's Sustainable Communities Team –** A PG&E Community Energy Manager has been assigned to Santa Clara County to work jointly with each municipality to develop a comprehensive energy management strategy that the City can implement across institutional, residential, business, and industrial sectors. In addition, PG&E can provide city and county energy use data, GHG inventory assistance, and information on innovative pilot grant funding for projects that aim to reduce GHG emissions in each community.

Local Efforts

Though the key tenants of sustainability were only recently formally integrated into the City's hierarchy, the City of Cupertino has long prioritized energy efficiency, water conservation, pollution prevention, materials management, green information technologies (IT) and infrastructure (most recently the award-winning Don Burnett Bicycle Footbridge and Stevens Creek Restoration Project), and alternative transportation technologies and commuting through its municipal operations and community-wide services. Historically, these initiatives were managed as independent projects and have since become integrated into the Sustainability Division's scope of work to broaden into programs and service areas among diverse stakeholder groups and effectively implement the Sustainability Element of the City's General Plan.

Since its formation, the Sustainability Division has worked to bring environmental awareness across departments and engage staff, businesses, students, and residents in activities to grow environmental stewardship, achieve greenhouse gas reductions, and realize resource conservation goals. These goals have since been institutionalized through the City's adoption of diverse policies including an Environmentally Preferable Procurement Policy, Green Building Ordinance, and Water Efficient Landscaping Ordinance, among others. Further, the City's sustainability-linked efforts have led to two new community designations of Tree City USA by the Arbor Day Foundation and silver-certified Bicycle Friendly Community by the American League of Bicyclists.

Program staff's main duties are diverse, and focus primarily on:

- Developing strategic plans,
- establishing quantitative benchmarks and analyses (e.g., cost, utility consumption),
- providing research and technical assistance,
- fostering public agency/public-private partnerships,
- tracking performance,
- formulating municipal policies,
- accessing grants, and
- implementing and engaging stakeholders in innovative pilots and programs.

These actions are achieved through close coordination with City Council, senior management, business leaders, and members of the community to develop a consistent plan to exceed regulatory compliance and reach long- and short-range program goals, established both internally and through regional (e.g., Bay Area Climate Compact) and national initiatives (e.g., Mayor's Climate Protection Agreement).

Cupertino simplifies its quantitative sustainability goals under the following four-phase framework:

Since the Division's formation, this team has benchmarked Cupertino's municipal and community-wide emissions as a means of better understanding the City's impact (goal 1); implemented myriad municipal energy and water efficiency projects (e.g., energy-efficient traffic controller and streetlight retrofits, renewable energy projects, electric vehicle charging stations, interior lighting upgrades, HVAC upgrades, IT energy management software installations, irrigation controller retrofits) to reduce the City's footprint (goal 2); and empowered municipal

employees to follow the City's lead by utilizing a new bicycle fleet, employee commute programs, alternative work schedules, and community-wide energy efficiency programs (goal 3). The Sustainability Division team is now focused on extending internal successes to the broader community by expanding existing residential- and business-focused programs and services (goal 4). Details of these initiatives are shared throughout the measure descriptions in Chapters 3 and 4.

Plan Preparation

Regional Framework

This CAP was prepared as part of a regional effort led by the Santa Clara County Office of Sustainability. Through this effort, local governments within Santa Clara County were invited to participate in the joint preparation of community-wide and/or municipal operations climate action plans to leverage grant funding provided by PG&E, and additional funding provided by the Santa Clara County Office of Sustainability. Participants included the cities of Cupertino, Gilroy, Morgan Hill, Mountain View, Saratoga, and San José, as well as the County of Santa Clara. As part of this process, each of the CAPs were developed from a similar template to provide overall consistency from one CAP to the next and as a means of sourcing future collaboration opportunities to regionally mitigate emissions that know no boundaries.

> "If we are together nothing is impossible. If we are divided all will fail."
>
> – Winston Churchill

Through this regional approach, the participants jointly prepared baseline emissions inventories and forecasts with a consistent methodology that allows direct comparison of one jurisdiction to the next. It also allowed development of common emissions reduction targets and implementation timelines to further support future collaboration towards emissions reductions. Early project meetings among the participants established a local network of colleagues that forms the foundation of this regional collaboration framework.

Public Outreach and Community Engagement

Given that this CAP will serve as a resiliency roadmap for the entire community, the City sought to engage its residents, businesses, and broader stakeholder base in its design to ensure the right approach was taken throughout the plan. The City provided several public engagement opportunities during the CAP development process to present information, gather comments, and begin a community dialogue that will continue through plan implementation. Two public workshops were held at the LEED Platinum Kirsch Center for Environmental Studies at De Anza College, along with supporting online surveys developed to mimic the workshop activities for residents who were unable to attend. The City also held two focus group meetings to collect additional input on specific topic areas. The first focus group meeting addressed the business community through the Cupertino Chamber of Commerce, while the second invited comments from representatives of the local real estate industry. The City also held study sessions with the

Planning Commission and City Council prior to development of the CAP, both of which were open to the public, to ensure the Plan aligned with the expectations of the City's elected and appointed officials. Comments collected from each of these engagement opportunities were used to inform the climate planning approach presented throughout this CAP. See Appendix A for a summary of the public comments collected during plan preparation.

Scope and Content of the Climate Action Plan

The CAP comprises seven chapters: 1) Climate Change and Cupertino; 2) Greenhouse Gas Emissions and Targets; 3) Community-wide Reduction Measures; 4) Local Government Reduction Measures, 5) Personal Actions, 6) Adaptation and Resiliency, and 7) Benchmarks and Next Steps. Appendices A through G provide additional detail on topics covered within the CAP. The contents of each chapter and appendix are briefly described below:

CAP CHAPTERS:

- **Chapter 1: Climate Change and Cupertino** describes the community's rationale for reducing GHG emissions, as well as the goals of the CAP to comply with local Air Quality Management District guidelines, as applicable. This chapter provides an overview of the topics covered in the CAP, presents conventional climate change science findings, and describes statewide actions to address climate change. This chapter also introduces the CAP's relationship to the City's General Plan Amendment, and its ability to enable a CEQA process known as "streamlining," which allows future development projects that are found to be consistent with the CAP to skip certain steps in the traditional CEQA review process.
- **Chapter 2: Greenhouse Gas Emissions and Targets** outlines important first steps taken to develop the CAP, including the 2010 baseline GHG inventories, forecasting

future emissions in 2020, 2035, and 2050, and setting GHG reduction targets for 2020 and longer-range targets for 2035. This chapter also describes the local reductions attributable to implementation of statewide climate change policy, and the resulting emissions reduction gap between the targets and the statewide actions, which will be addressed through local actions developed in Chapters 3 and 4.

- **Chapter 3: Community-wide Reduction Measures** addresses five main reduction strategies: energy, land use and transportation, water conservation, waste reduction, and green infrastructure. The chapter provides a summary of projected reductions and a description of the reduction strategy development process. It also identifies the following information for each reduction strategy: key elements, existing programs and accomplishments, implementation actions, performance metrics against which to measure success, and estimated GHG reductions.
- **Chapter 4: Local Government Reduction Measures** describes the specific efforts that the City of Cupertino has already taken and will take in the future to lead by example in emissions reductions. Similar to Chapter 3, this measure presents emissions reduction opportunities organized into three key strategy areas: (1) Improve Facilities, (2) Convert Vehicle Fleet, and (3) Reduce Solid Waste. The strategy areas include goals, reduction measures, and implementation actions, along with supporting reduction estimates, departmental responsibility, performance tracking information, and implementation timelines.
- **Chapter 5: Personal Actions** describes the steps that Cupertino's residents and local businesses can take starting today to kick-off the implementation phase of the CAP.
- **Chapter 6: Adaptation and Resiliency** leverages state and regional resources that identify the social, economic, and environmental vulnerabilities our changing climate presents. It also offers a resilience framework that will enable our community to plan, adapt, and thrive.
- **Chapter 7: Benchmarks and Next Steps** describes the process to monitor the City's progress toward achieving its GHG reduction targets. This chapter identifies monitoring procedures, plan update processes, and other steps to ensure successful CAP implementation.

CAP APPENDICES:

- **Appendix A: Community Outreach Responses** summarizes the public comments collected during plan preparation, including two community open houses, two focus group meetings, and study sessions with the Planning Commission and City Council.
- **Appendix B: GHG Inventory and Reductions Methodology** provides a technical description of the methodology and data sources used to prepare the 2010 emissions inventories and 2020, 2035, and 2050 emissions forecasts.

- **Appendix C: Implementation Tracking Framework** describes how city staff will implement CAP measures and related actions, and track the performance metrics identified for each measure as part of the larger regional CAP program.
- **Appendix D: Climate Action Planning Best Management Practices** provides the list of GHG reduction best management practices (BMP) developed from a review of regional, national, and international cities, which was presented to City staff for identification of City actions already employed and potential new strategies for consideration in the CAP.
- **Appendix E: Water Conservation and Energy Efficiency Toolkit** presents the Do-It–Yourself home energy efficiency and water conservation Green@Home Toolkit so Cupertino's residents can begin to take climate action.
- **Appendix F: Green Business Certification** provides the checklist to get certified as a green business through GreenBiz Cupertino, which offers free energy, water, and waste assessments, free equipment to help businesses save water, free guidance to help with the certification process, and recognition of business leadership.
- **Appendix G: green@school Certification** shares background on the City's green@school program, created to empower students as environmental change agents on their school campuses, at home and throughout their community. green@school trains K-12 Cupertino students as eco-experts to help shepherd their school through a sustainability certification program to create a cleaner, greener and healthier school site.

Relationship to the General Plan Amendment

Whether by local desire, guidance from the State of California, or both, a growing number of cities and counties are addressing climate change in their General Plans through inclusion of policies and programs that also help reduce GHG emissions. Since GHG emissions are a cross-cutting issue addressed by many General Plan elements, the CAP as a whole is generally considered and defined as an implementation strategy for the General Plan. This structure allows the City to update the CAP on an ongoing, as-needed basis to ensure that its climate protection efforts reflect both current legislation and emerging best practices, without triggering a General Plan Amendment.

In addition, several state agencies have provided guidance and case studies for local governments to address climate change in their General Plans. For example:

- Since 2008, the California Attorney General's office has provided guidance to local governments on addressing climate change and greenhouse gas reduction through General Plan policies. (See: http://oag.ca.gov/environment/climate-change)
- The California Office of Planning and Research (OPR) is preparing an update to the state's *General Plan Guidelines* that will include guidance for GHG emissions reduction and climate adaptation. (See: http://www.opr.ca.gov/s_generalplanguidelines.php)

- The California Natural Resources Agency released a Climate Adaptation Policy Guide for local governments.
  (See: http://resources.ca.gov/climate/safeguarding/adaptation_policy_guide/)
- The California Department of Housing and Community Development released a guidance document on General Plan housing element policies and programs addressing climate change with case study examples.
  (See: http://www.hcd.ca.gov/hpd/HE%20Guidance%20Complete%20package.pdf)
- The Office of Planning and Research prepared guidance documents for addressing complete streets in General Plans as required by AB 1358.
  (See: http://opr.ca.gov/docs/Update_GP_Guidelines_Complete_Streets.pdf)

Cupertino was simultaneously preparing an amendment to its General Plan while developing the Climate Action Plan. Proposed General Plan Amendment growth projections and policies/measures were considered during CAP preparation, and expanded upon, where appropriate. At the time of CAP development, the City's policy commitment included encouraging higher density, mixed-use and infill development in appropriate locations, expanding energy efficiency and renewable energy development in the community, supporting multi-modal transportation options, and continuing resource conservation efforts.

To ensure the CAP was able to provide future CEQA review streamlining benefits, as described below, the community-wide emissions forecasts were developed based on the population, employment, and resulting vehicle miles traveled (VMT) growth estimates resulting from build-out of the General Plan Amendment's Land Use Alternative C scenario. This scenario represented the highest growth scenario under consideration, and therefore, would also result in the highest emissions growth. CAP measures were developed to provide sufficient emissions reduction potential to achieve the City's 2020 emissions target under this highest-growth alternative.

Relationship to the California Environmental Quality Act

Local governments may prepare a Plan for Reduction of Greenhouse Gases that is consistent with AB 32 goals. By preparing such a plan, the City can streamline CEQA review of subsequent plans and projects that are consistent with the GHG reduction strategies and targets in the plan (this is often referred to as "streamlining"). To meet the standards of a qualified GHG reduction plan, Cupertino's CAP must achieve the following criteria (which parallel and elaborate upon criteria established in state CEQA Guidelines Section 15183.5[b][1]):

- Complete a baseline emissions inventory and project future emissions
- Identify a community-wide reduction target

- Prepare a CAP to identify strategies and measures to meet the reduction target
- Monitor effectiveness of reduction measures and adapt the plan to changing conditions
- Adopt the CAP in a public process following environmental review

This approach allows jurisdictions to analyze and mitigate the significant effects of GHGs at a programmatic level, by adopting a plan for the reduction of GHG emissions in a public process following environmental review. Later, as individual projects are proposed, project-specific environmental documents may rely on the GHG emissions reductions measures in the CAP to determine that estimated project-level GHG emissions would be less than significant in their cumulative impacts analysis.

A project-specific environmental document that relies on this CAP for its cumulative impacts analysis must identify specific CAP measures applicable to the project, and how the project incorporates the measures. If the measures are not otherwise binding and enforceable, they must be incorporated as mitigation measures applicable to the project. If substantial evidence indicates that the GHG emissions of a proposed project may be cumulatively considerable, notwithstanding the project's compliance with specific measures in this CAP, an EIR must be prepared for the project. Following adoption of this CAP, the City will develop guidance on how future projects seeking to use this CEQA streamlining benefit will be reviewed to ensure compliance with the CAP's emissions reduction measures. The City's guidance could include the development of a checklist or points-based rating system to evaluate future projects' compliance with the CAP; an approach used by numerous communities throughout the state seeking CAP-tied project-level CEQA streamlining (e.g., Sacramento, Los Altos, Pleasanton).