

## SECTION 1: EXECUTIVE SUMMARY

The City of San Ramon (City) has prepared a Climate Action Plan as its primary strategy for ensuring that the buildout of the General Plan 2030 will not conflict with the implementation of Assembly Bill 32 – the Global Warming Solutions Act of 2006. Assembly Bill (AB) 32 requires California to reduce statewide greenhouse gas emissions to 1990 levels by the year 2020. This Climate Action Plan (CAP) is designed to reduce community related and City operations related greenhouse gas emissions to a degree that would not hinder or delay implementation of AB 32.

### 1.1 - Climate Action Plan Purpose

The purpose of this Climate Action Plan (CAP) is to:

- Outline a course of action for the City government and the community of San Ramon to reduce greenhouse gas emissions 15 percent below 2008 levels by the year 2020 and adapt to effects of climate change, and
- Provide clear guidance to City staff regarding when and how to implement key provisions of the CAP.

The earth's natural warming process is known as the "greenhouse effect." Certain atmospheric gases act as an insulating blanket for solar energy to keep the global average temperature in a suitable range. Scientists studying the rise in global temperatures during the late twentieth century believed that natural variability alone does not account for that rise. Rather, human activity has increased emissions of carbon dioxide and other forms of greenhouse gases resulting in an enhanced greenhouse effect. Human-related emissions have been growing to unprecedented levels since the Industrial Revolution and appear to be accelerating the climate change process. Increased levels of greenhouse gases in the atmosphere can cause shifts in weather patterns and changes to traditional precipitation and temperature levels. In California, it is predicted that climate change could cause sea level rise, decrease the amount of snow in the Sierra snowpack, increase flooding, increase wildfires, and other impacts.

### Emissions Inventory

As shown in Table 1, in a "business as usual" scenario, emissions are anticipated to increase from 2008 levels in 2020 and 2030. A business as usual scenario examines the impact of growth without accounting for the strategies within this CAP or the benefits of state regulations and programs that reduce greenhouse gas emissions. The CAP includes emission reduction targets based on the methodologies provided in the Bay Area Air Quality Management (BAAQMD) CEQA Air Quality Guidelines.

The BAAQMD CEQA Air Quality Guidelines provide three alternative reduction approaches. The first requires a 15-percent reduction from current emissions (2008 in this case). The second requires plans to meet an emission efficiency below 6.6 metric tons of carbon dioxide equivalents (MTCO<sub>2</sub>e) per service population per year. The third approach is based on demonstrating that the plan reduces emissions to 1990 levels by 2020. That approach is difficult to implement because of insufficient data available to develop a reasonably accurate 1990 inventory. Therefore, the CAP does not use that approach. The CAP includes another threshold approach based on consistency with California Air Resources Board (CARB) Scoping Plan targets for land use-related sources. That approach requires a 26-percent reduction in land use-related emissions compared with business as usual by 2020 accounting for reductions that will be achieved by the state regulations and reduction programs for greenhouse gas emissions coupled with reductions achieved by the City through its development decisions and local reduction programs. With the reductions shown in this CAP, by the year 2020, emissions from new development are reduced by more than 15 percent below 2008 levels. The CAP also shows that the City has a plan efficiency below 6.6 MTCO<sub>2</sub>e per service population per year and reductions in the CAP when combined with reductions from state regulations and programs will achieve the 26-percent reduction target from the 2020 business as usual inventory showing consistency with state targets.

**Table 1: City of San Ramon Greenhouse Gas Emissions Summary**

Inventory	Greenhouse Gas Emissions (Metric Tons CO <sub>2</sub> e)		
	2008	2020	2030
Community Business as Usual Emissions	652,615	716,843	808,634
Community Emissions with Reductions	—	520,113	—
Greenhouse Gas Emission 15% Target	—	554,723	—
2020 Service Population Target (MTCO <sub>2</sub> e per Service Population)	—	6.6	—
San Ramon 2020 Emissions (MTCO <sub>2</sub> e per Service Population)	—	5.5	—
<b>Do emissions exceed targets?</b>	—	<b>No</b>	—
City Government Emissions	4,619	5,591	6,400
Notes: MTCO <sub>2</sub> e = metric tons of carbon dioxide equivalents SP = service population (residents + employment): 2008: 106,565, 2020: 130,284, 2030: 150,800 The greenhouse gas reduction target for 2020 emissions is 15% below 2008 business as usual emissions; the SP target is from the Bay Area Air Quality Management District's guidelines. BAAQMD and CARB have not developed targets for 2030. City government emissions are a subset of community emissions Source: Data compiled by Michael Brandman Associates using the ICLEI Clean Air and Climate Protection 2009 Software, Version 2.2.1			

## Climate Action Plan Strategy

The CAP strategy is primarily based upon the land use, transportation, and conservation policies that are part of the General Plan 2030, recent specific plans, and major development plans in the City. The concept is that design, density, and pattern of land uses impacts the amount people drive and the options available for using less polluting and energy-consuming modes of transportation such as walking, bicycling, and transit. The plans also promote energy efficiency in buildings, government operations, and through more efficient water use. Implementation of these plans helps to ensure that the City will be developed in ways that produces fewer greenhouse gas emissions. The CAP strategy includes programs and measures that apply to both existing and new development within the City. In addition, the changes in land use pattern and transportation infrastructure that will result from implementation of the General Plan 2030 will improve the transportation options for all residents of the City. The CAP strategy and its content are consistent with a “qualified” Greenhouse Gas Reduction Strategy pursuant to current Bay Area Air Quality Management District recommendations.

This CAP identifies policies within the City of San Ramon General Plan that would decrease the City’s emissions of greenhouse gases. This CAP also lists Implementation Strategies that add more details and specific actions to the General Plan policies and clarify how the reductions would occur. This CAP demonstrates that the General Plan policies and CAP strategies would reduce emissions to the reduction target. The CAP includes strategies in the following categories:

- Land use: higher-density, mixed-use, transit-oriented, pedestrian-oriented, and compact development
- Transportation: provision of transit facilities, pedestrian connections, bicycle infrastructure, traffic calming, use of low emission vehicles, transportation demand management, end of trip facilities, and parking measures
- Energy conservation
- Water conservation
- Waste reduction and recycling
- Regional cooperation

The strategies listed above will be implemented in new development areas as projects are built in compliance with General Plan policies, development standards, conditions of approval, and CEQA mitigation measures. Existing residents and businesses will be subject to statewide greenhouse gas regulations and to existing and new citywide and regional educational and incentive programs for energy and water conservation, and waste reduction and recycling. Construction of transportation infrastructure supportive of walking, bicycling, and transit use will be accomplished in new development areas, but also in existing areas

when facilities are upgraded or rebuilt. Creating new and redeveloped high-density, pedestrian- and transit-oriented development provides destinations for the entire community that are supportive of alternative transportation modes. The CAP builds on the City's history of implementing innovative and effective environmental and conservation programs to successfully achieve its objectives.

In order to ensure that the CAP strategy is implemented on schedule and targets are achieved, this CAP sets out an implementation and monitoring framework. The CAP recognizes that technologies to reduce greenhouse gases and regulatory efforts related to climate change are rapidly evolving and provides flexibility to adapt to changing circumstances.

Cities with Climate Action Plans, that are consistent with the state and regional AB 32 and SB 375 reduction targets, can use their CAP as the basis for determining if projects would result in significant climate change impacts under CEQA. The San Ramon CAP is intended to fulfill this function. The BAAQMD has reviewed the CAP and identified enhancements that have been incorporated into the document.