

# **APPENDIX A: General Plan Sustainability Policies and Programs**

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## GENERAL PLAN SUSTAINABILITY POLICIES AND PROGRAMS

### INTRODUCTION

The issue of global climate change has received greater attention from governments around the world in recent years. Global climate change refers to the change in the average weather of the earth that may be measured by changes in wind patterns, storms, precipitation, and temperature. In 2006, the California State Legislature took a proactive role in addressing the challenges of climate change with the adoption of the California Global Warming Solutions Act of 2006, Assembly Bill 32 (AB 32). AB 32 focuses on reducing GHG emissions in California. AB 32 requires the California Air Resources Board (CARB), the state agency charged with regulating state-wide air quality, to adopt rules and regulations that would achieve GHG emissions equivalent to 1990 state-wide levels by 2020.

As part of the 2035 General Plan, the County integrated measures and actions for into the General Plan goals, policies, and implementation programs to reduce greenhouse gas emissions and address climate change impacts. In response to the mandate of SB 97, the CEQA Guidelines (Section 15183.5) establish standards for the contents and approval process of plans to reduce GHGs. The 2035 General Plan has been prepared the Plan to meet State standards as a qualified plan for the reduction of greenhouse gas emissions.

The 2035 General Plan takes steps to address the challenging issue of climate change by reducing GHG emissions, improving energy efficiency, reducing waste and promoting recycling, and managing water use. The General Plan will reduce GHG emissions primarily through land use patterns that support public transit, increased opportunities for pedestrians and bicycle use and encouraging “green building” practices and alternative energy systems. Policies also address adaptation to climate change, such as reducing the impacts from the urban heat island effect, managing water use, and increasing flood protection.

The sources, impacts, and solutions to climate change are complex. Climate change and GHG emissions reduction are addressed by policies and programs throughout the General Plan, rather than in a single section. Appendix A provides a detailed analysis of how the 2035 General Plan addresses climate change and acts as the County's qualified plan for the reduction of greenhouse gas emissions. Through implementation of the 2035 General Plan, the County will ensure it is contributing to State objectives to reduce GHG emissions (i.e., EO S-3-05) AB 32, SB 375) and address the impacts of a changing climate. The County will annually monitor its efforts to reduce GHG emissions and report on its progress as part of its State-mandated General Plan implementation report.

## A-1: San Joaquin County GHG Inventory and Projections

Emissions Sector	Subsector	2007	2020	2035	2050
Energy - Electricity					
	Residential	174,391	201,044	236,896	279,142
	Commercial	356,393	410,860	484,129	570,464
	Industrial	21,933	25,285	29,795	35,108
	Subtotal	552,717	637,189	750,820	884,714
Energy - Natural Gas					
	Residential	88,197	101,676	119,808	141,174
	Commercial	181,945	209,751	247,156	291,232
	Industrial	8,672	9,998	11,781	13,882
	Subtotal	278,814	321,425	378,745	446,287
<b>Total Energy (Electricity and Natural Gas)</b>	<b>Total</b>	<b>831,532</b>	<b>958,614</b>	<b>1,129,565</b>	<b>1,331,001</b>
<b>Transportation</b>	<b>Total</b>	<b>1,350,924</b>	<b>1,558,620</b>	<b>2,189,999</b>	<b>2,580,544</b>
<b>Waste</b>	<b>Total</b>	<b>41,067</b>	<b>47,343</b>	<b>55,786</b>	<b>65,734</b>
<b>Wastewater</b>	<b>Total</b>	<b>2,784</b>	<b>3,210</b>	<b>3,782</b>	<b>4,456</b>
<b>Agriculture</b>		<b>5,568</b>	<b>2,877</b>	<b>2,877</b>	<b>2,877</b>
	Residue Burn	40,089	40,089	40,089	40,089
	Livestock	518,780	518,780	518,780	518,780
	Rice Cultivation	5,996	5,996	5,996	5,996
	Farming Equipment	172,837	172,837	172,837	172,837
	Ag Pumps	28,116	28,116	28,116	28,116
	Fertilizer	59,871	59,871	59,871	59,871
	<b>Total</b>	<b>825,689</b>	<b>825,689</b>	<b>825,689</b>	<b>825,689</b>

## GENERAL PLAN SUSTAINABILITY POLICIES AND PROGRAMS

<b>A-1: San Joaquin County GHG Inventory and Projections</b>					
<b>Total San Joaquin County (Unincorporated) GHG Emissions</b>		<b>3,051,996</b>	<b>3,393,475</b>	<b>4,204,821</b>	<b>4,807,425</b>
<b>Target/Goals</b>			<b>2,594,196</b>	<b>1,556,518</b>	<b>518,839</b>
<b>Reduction Needed from Projected Emissions to Meet Target/Goals</b>			<b>799,279</b>	<b>2,648,303</b>	<b>4,288,586</b>
<b>Legislative Reductions</b>					
	Pavley 1 +LCDF		-340,085	-583,930	-696,747
	Title 24		-149,245	-325,105	-383,081
	RPS/RES		-210,272	-247,770	-291,956
	<b>Total</b>		<b>-699,603</b>	<b>-909,035</b>	<b>-1,079,828</b>
<b>GHG Reductions from County Actions</b>					
	Energy		-34,879	-52,487	-73,235
	Transportation		-779	-1,095	-1,290
	Water and Wastewater		-35,507	-50,207	-50,760
	Agriculture		-24,830	-24,830	-24,830
	<b>Total</b>		<b>-95,995</b>	<b>-128,619</b>	<b>-150,115</b>
<b>Overall Surplus (-) or Gap</b>					
	<b>Total</b>		<b>3,681</b>	<b>1,610,649</b>	<b>3,058,643</b>

## A-2: GHG Reductions from County Actions Summary

GHG Reduction Strategy	San Joaquin General Plan Policy/Implementation Program	2020 GHG Reduction (MT C02e)	2035 GHG Reduction (MT C02e)
<b>Energy Reduction Strategies</b>			
Energy Strategy 1: Renewable Energy <ul style="list-style-type: none"> <li>5% of existing residential reduce energy consumption off the grid by 75%</li> <li>5% of existing commercial reduce energy consumption off the grid by 50%</li> </ul> Energy Strategy 1: PACE Program <ul style="list-style-type: none"> <li>25% of new residential reduce energy consumption off the grid by 75%</li> <li>25% of new commercial reduce energy consumption off the grid by 50%</li> </ul>	NCR-F: Renewable Energy/PACE Program	25,193	41,074
Energy Strategy 2: Participation in PGE Renewable Energy <ul style="list-style-type: none"> <li>5% of existing users purchase 50% renewable option</li> <li>1% of existing users purchase 100% renewable option</li> </ul>	NCR-5.1: Nonrenewable Energy and Energy Efficiency, NCR-5.2: Alternative Energy, NCR-G: Remove Barriers to Renewable Energy NCR-K: Industrial Design Standards	9,685	11,412
<i>Subtotal</i>		34,879	52,487





<b>A-2: GHG Reductions from County Actions Summary</b>			
<b>GHG Reduction Strategy</b>	<b>San Joaquin General Plan Policy/Implementation Program</b>	<b>2020 GHG Reduction (MT C02e)</b>	<b>2035 GHG Reduction (MT C02e)</b>
<b>Transportation Reduction Strategies</b>			
Transportation Strategy 2: Complete Streets <ul style="list-style-type: none"> <li>0.05% reduction in VMT based on percentage of streets with planned improvements</li> </ul>	TM-2.1: Urban Complete Streets TM-2.2: Reconstructed Urban Complete Streets TM-2.3: Land Use Patterns TM-2.4: Rural Complete Streets TM-2.6: Funding for Complete Streets TM-2.7: New Development	779	1,095
<i>Subtotal</i>		779	1,095
<b>Waste Reduction Strategies</b>			
Waste Strategy 1: Diversion, Recycling, and Reuse <ul style="list-style-type: none"> <li>75% diversion of landfilled waste by 2020</li> <li>90% diversion of landfilled waste by 2035.</li> </ul>	PHS-6.5: Diversion, Recycling, and Reuse	35,507	50,207
<i>Subtotal</i>		35,507	50,207
<b>Agriculture Reduction Strategies</b>			


## A-2: GHG Reductions from County Actions Summary

GHG Reduction Strategy	San Joaquin General Plan Policy/Implementation Program	2020 GHG Reduction (MT C02e)	2035 GHG Reduction (MT C02e)
Agriculture Strategy 1: Agricultural Equipment and Emissions <ul style="list-style-type: none"> <li>10% improvement in fuel use in 5% (participation rate) of agricultural vehicles implementing BMPs.</li> </ul>	PHS-6.8: Agricultural Equipment and Emissions	864	864
Agriculture Strategy 2: Agricultural Fertilizer Application <ul style="list-style-type: none"> <li>10% reduction in fertilizer application</li> </ul>	PHS-Q: Agricultural Best Practices Implementation	5,987	5,987
Agriculture Strategy 3: Agriculture Burning <ul style="list-style-type: none"> <li>10% reduction in the amount of burned agriculture residue from 25% of agriculture acres</li> </ul>	PHS-Q: Agricultural Best Practices Implementation	1,002	1,002
Agriculture Strategy 4: Agricultural Energy Use <ul style="list-style-type: none"> <li>10% diesel pumps converted to solar power</li> </ul>	PHS-Q: Agricultural Best Practices Implementation	2,812	2,812
Agriculture Strategy 5: Manure Management <ul style="list-style-type: none"> <li>10% reduction in the amount of manure produced</li> </ul>	PHS-Q: Agricultural Best Practices Implementation, PHS-6.4: Methane Digesters	14,165	14,165
<i>Subtotal</i>		24,830	24,830
<b>Total</b>		<b>95,995</b>	<b>128,619</b>










## GENERAL PLAN SUSTAINABILITY POLICIES AND PROGRAMS

A-3: Sustainability Policies and Programs	2020 GHG Reduction (MT C02e)	2035 GHG Reduction (MT C02e)	Adaption & Resiliency Program
<b>3.1 Community Development Element</b>			
<b>GOAL LU-1</b>			
Direct most urban development towards cities and urban and rural communities within the unincorporated county to promote economic development, while preserving agricultural lands and protecting open space resources.			
<b>LU-1.1 Compact Growth and Development</b> The County shall discourage urban sprawl and promote compact development patterns, mixed-use development, and higher-development intensities that conserve agricultural land resources, protect habitat, support transit, reduce vehicle trips, improve air quality, make efficient use of existing infrastructure, encourage healthful, active living, conserve energy and water, and diversify San Joaquin County's housing stock. (RDR)	Supporting		
<b>LU-1.4 Encourage Infill Development</b> The County shall encourage infill development to occur in Urban and Rural Communities and City Fringe Areas within or adjacent to existing development in order to maximize the efficient use of land and use existing infrastructure with the capacity to serve new development. The County shall balance infill development within outward expansion of communities and new development in other unincorporated areas. (RDR)	Supporting		
<b>LU-1.7 Farmland Preservation</b> The County shall consider information from the State Farmland Mapping and Monitoring Program when designating future growth areas in order to preserve prime farmland and limit the premature conversion of agricultural lands. (RDR)	Supporting		
<b>LU-1.8 Support for Alternative Transportation Modes</b> The County shall encourage land use patterns that promote walking and bicycling and the use of public transit as alternatives to the personal automobile. (RDR)	Supporting		





A-3: Sustainability Policies and Programs	2020 GHG Reduction (MT C02e)	2035 GHG Reduction (MT C02e)	Adaption & Resiliency Program
<b>LU-1.11 Regional Housing Needs Allocations</b> The County shall coordinate with the San Joaquin Council of Governments to direct State regional housing needs allocations predominantly to cities in an effort to promote compact development patterns and support the principles of the San Joaquin County Blueprint and implementation of SB 375. (IGC)	Supporting		
<b>LU-1.12 Regional Coordination</b> The County shall work with the San Joaquin Council of Governments to develop and periodically update the Sustainable Communities Strategy or Alternative Planning Strategy as part of the Regional Transportation Planning process. (IGC)	Supporting		
<b>LU-1.13 Regional Growth Considerations</b> The County shall consider the San Joaquin Council of Governments Regional Transportation Plan, including the Sustainable Communities Strategy or Alternative Planning Strategy, and adopted city general plans and those of surrounding counties each time it considers an update to the General Plan or any master plan, strategy, or zone. (PSP)	Supporting		
<b>LU-1.14 Incentives and Streamlined Development</b> The County shall support expanded incentives and CEQA streamlining opportunities for projects that are consistent with the adopted San Joaquin Council of Governments RTP/SCS and implement the objectives of SB 375. (RDR/PSP/IGC)	Supporting		






## GENERAL PLAN SUSTAINABILITY POLICIES AND PROGRAMS

<b>A-3: Sustainability Policies and Programs</b>		<b>2020 GHG Reduction (MT C02e)</b>	<b>2035 GHG Reduction (MT C02e)</b>	<b>Adaption &amp; Resiliency Program</b>
<b>GOAL LU-2</b>				
<b>Promote efficient development and land use practices in new development that provide for the protection of vital resources and enhancement of communities.</b>				
<b>LU-2.2 Sustainable Building Practices</b> The County shall promote and, where appropriate, require sustainable building practices that incorporate a “whole system” approach to designing and constructing buildings that consume less energy, water and other resources, facilitate natural ventilation, use daylight effectively, and are healthy, safe, comfortable, and durable. (RDR)		<b>Supporting</b>		
<b>LU-2.3 Adaptive Reuse</b>  The County shall encourage the retention and the adaptive reuse of existing structures to limit the generation of waste. (RDR/PSP)		<b>Supporting</b>		
<b>LU-2.4 Green Building Retrofit</b>  The County shall encourage the retrofitting of existing structures with green building technologies/practices and encourage structures being renovated to be built to a green building standard (e.g., Leadership in Energy and Environmental Design (LEED)). (RDR)		<b>Supporting</b>		




A-3: Sustainability Policies and Programs		2020 GHG Reduction (MT C02e)	2035 GHG Reduction (MT C02e)	Adaption & Resiliency Program
GOAL LU-3				
Preserve and enhance the character and scale of San Joaquin County's communities and rural areas, including their architectural heritage and historic character.				
LU-3.4 Walkable and Bikeable Streets The County shall encourage new streets within Urban and Rural Communities and City Fringe Areas to be designed and constructed to not only accommodate auto and truck traffic, but also serve as comfortable pedestrian and cyclist environments and reflect public health goals by encouraging physical activity. These should include, but not be limited to: <ul style="list-style-type: none"><li>street tree planting adjacent to curbs and between the street and sidewalk to provide a buffer between pedestrians and automobiles, where appropriate,</li><li>minimize curb cuts along streets, sidewalks on both sides of streets,</li><li>bike lanes and walking paths, where feasible on collectors and arterials, and traffic calming devices such as roundabouts, bulb-outs at intersections, and traffic tables. (RDR/PSP)</li></ul>		Supporting		
LU-3.11 Solar Access The County shall encourage new residential subdivisions and new commercial, office, industrial, and public buildings to be oriented and landscaped to enhance natural lighting and solar access in order to maximize energy efficiency. (RDR)		Supporting		





## GENERAL PLAN SUSTAINABILITY POLICIES AND PROGRAMS

<b>A-3: Sustainability Policies and Programs</b>		<b>2020 GHG Reduction (MT C02e)</b>	<b>2035 GHG Reduction (MT C02e)</b>	<b>Adaption &amp; Resiliency Program</b>
<b>GOAL LU-5</b>				
<b>Promote the development of regional and locally-serving commercial uses in communities and other areas of the unincorporated County.</b>				
<b>LU-5.5 Bicycle Access and Parking</b> The County shall require new commercial development within Urban Communities and City Fringe areas to include bicycle access and secure parking racks. (RDR)		<b>Supporting</b>		
<b>LU-5.20 Mixed-Use Community Centers and Corridors</b> The County shall encourage both vertical and horizontal mixed-use development within community centers and near or along transportation and transit corridors, bicycle paths, and pedestrian facilities as a means of providing efficient land use, housing, and transportation options for county residents. The County shall ensure that mixed-use developments include appropriate transit, bicycle, and pedestrian facilities. (RDR/PSP)		<b>Supporting</b>		
<b>LU-5.21 Mixed Uses</b> The County shall encourage mixed-use development in urban communities, provided it does not create land use conflicts and provides for a close physical and functional relationship of project components. (RDR/PSP)		<b>Supporting</b>		
<b>LU-5.22 Mixed-Use Development</b> The County shall require new mixed-use developments to be developed under a single plan that details the full buildout of the development and any associated phasing for construction and includes specific design guidelines and standards that address the overall site design, scale of development, relationship to adjacent uses, circulation and parking, architecture, infrastructure, and landscaping. (RDR/PSP)		<b>Supporting</b>		

A-3: Sustainability Policies and Programs		2020 GHG Reduction (MT C02e)	2035 GHG Reduction (MT C02e)	Adaption & Resiliency Program
LU-5.23    Live-Work Development  The County shall encourage mixed-use developments to include live-work floor plans for residents who desire office, commercial, or studio space adjacent to their living space. (RDR)		Supporting		
GOAL LU-6				
Promote the development of new industrial and employment uses in the unincorporated areas of the County that are compatible with surrounding land uses and meet the present and future needs of County residents.				
LU-6.1    Employment Centers  The County shall encourage the development of carefully planned employment centers and industrial uses in areas with suitable topography and adequate public infrastructure, including water, sewer, and transportation access. The County shall encourage New Communities to contain employment centers as well as other uses. (PSP)		Supporting		
LU-6.3    Employment Center Access  Where appropriate, the County shall direct new employment centers and industrial developments to locate near existing or future freeway interchanges and major highway intersections and along existing or future transit, bicycle, and pedestrian and trail corridors. (RDR/PSP)		Supporting		
LU-6.8    Sustainable Technologies   The County shall encourage all employment and industrial projects to incorporate sustainable technologies including energy and water efficient practices. (RDR)		Supporting		


## GENERAL PLAN SUSTAINABILITY POLICIES AND PROGRAMS



A-3: Sustainability Policies and Programs		2020 GHG Reduction (MT C02e)	2035 GHG Reduction (MT C02e)	Adaption & Resiliency Program
LU-6.11    Truck Terminal Location The County shall limit truck terminal locations limited to areas within one mile of a freeway interchange that are outside Urban and Rural Communities and outside the path of planned urban development. (RDR/PSP)		Supporting		
GOAL LU-9				
Provide for governmental, utility, institutional, educational, cultural, religious, and social facilities and services that are located and designed to complement San Joaquin County communities and to minimize incompatibility with neighborhoods and other uses.				
LU-9.4    LEED Standard for County-Owned Buildings The County shall ensure that all new or renovated County-owned buildings are energy efficient and meet, at a minimum, LEED (Leadership in Energy and Environmental Design) Silver or equivalent standard. (RDR/SO)		Supporting		
GOAL LU-10				
Promote a mix of compatible uses in appropriate areas of the Airport East Property at the Stockton Metropolitan Airport.				
LU-10.4    Airport East Property Transit and Bicycle Access The County shall plan for transit and bicycle access to the Airport East Property. (PSP)		Supporting		

<b>A-3: Sustainability Policies and Programs</b>		<b>2020 GHG Reduction (MT C02e)</b>	<b>2035 GHG Reduction (MT C02e)</b>	<b>Adaption &amp; Resiliency Program</b>
<b>GOAL C-1</b>				
<b>Maintain a planning framework that promotes the viability of Urban and Rural Communities and coordinates development within City Fringe Areas, while protecting the agricultural, open space, scenic, cultural, historic and natural resources heritage of the County.</b>				
<b>C-1.4 Complete and Well-Structured Communities</b> The County shall promote the development of complete and well structured Urban and Rural Communities whose physical layout and land use mix promote healthy activity and mobility (including walking and biking to services), and transit use (where available); foster community pride; enhance community identity; ensure public safety; are family-friendly and address the needs of all ages and abilities. (RDR/PSP)		<b>Supporting</b>		
<b>C-1.5 Orderly and Compact Development</b> The County shall promote orderly and compact development within Urban and Rural Communities and City Fringe Areas. The County shall direct urban development to areas within the designated boundary of each Urban and Rural Community, as defined on Figure C-1. (RDR)		<b>Supporting</b>		
<b>C-1.6 Promote Infill</b> The County shall promote infill development within existing Urban and Rural Communities and City Fringe Areas before expanding community boundaries. (PSP)		<b>Supporting</b>		
<b>C-1.7 Self-contained Communities</b> The County shall encourage the development of appropriately-scaled commercial uses and recreational opportunities in Urban and Rural Communities that reduce the need to travel outside the community. (RDR)		<b>Supporting</b>		








## GENERAL PLAN SUSTAINABILITY POLICIES AND PROGRAMS

<b>A-3: Sustainability Policies and Programs</b>		<b>2020 GHG Reduction (MT C02e)</b>	<b>2035 GHG Reduction (MT C02e)</b>	<b>Adaption &amp; Resiliency Program</b>
<b>GOAL C-2</b>				
<b>Provide a realistic planning area around each Urban Community that provides a framework for economic development, the provision of infrastructure and services, and overall quality of life.</b>				
<b>C-2.6 Reduce Commute Times</b> The County shall encourage the development of employment generating uses within Urban Communities to reduce commute-related travel. (PSP)		<b>Supporting</b>		





A-3: Sustainability Policies and Programs		2020 GHG Reduction (MT C02e)	2035 GHG Reduction (MT C02e)	Adaption & Resiliency Program
GOAL C-4				
Ensure that all development within City Fringe Areas is well planned, adequately served by necessary public facilities and infrastructure, and furthers Countywide economic development and open space preservation goals.				
C-4.3 Consistent Planning For land that is within a City Fringe Area, the County shall generally maintain General Plan land use designations that are consistent with the city’s adopted General Plan, provided a city’s planned growth patterns and development are consistent with the San Joaquin Council of Government’s Regional Transportation Plan and Sustainable Communities Strategy, provide for compact growth patterns and higher-density, mixed-use development, and include provisions to permanently preserve agricultural land within the County. The County shall maintain jurisdiction over development decisions in all unincorporated areas until annexations occur. (RDR/PSP/IGC)		Supporting		
GOAL ED-1				
To maintain a thriving business community and growing economy that provides well-paying jobs, a high quality of life, and a sound tax base.				
ED-1.4 Jobs-Housing Balance The County shall strive to improve the jobs-housing balance in the County so that more residents can live and work locally, primarily by pursuing additional jobs for the resident labor force. (PSP)		Supporting		


## GENERAL PLAN SUSTAINABILITY POLICIES AND PROGRAMS

A-3: Sustainability Policies and Programs		2020 GHG Reduction (MT C02e)	2035 GHG Reduction (MT C02e)	Adaption & Resiliency Program
GOAL ED-2				
To develop a diverse mix of businesses and industries and a balanced local economy.				
ED-2.4    Green Economy 🌍 The County shall encourage the development and expansion of industries and businesses that rely on environmentally-sustainable products and services, such as renewable energy, green building, clean transportation, water conservation, waste management and recycling, and sustainable land management. (PSP)		Supporting		
GOAL ED-4				
To support the continued financial growth of the agricultural sector and ag-related businesses.				
ED-4.10    Carbon Offsets The County shall support programs and projects that would help farmers and agricultural-processing facilities provide carbon offsets, if and when new regulations require industries to provide carbon offsets. (PSP)		Supporting		


<b>A-3: Sustainability Policies and Programs</b>		<b>2020 GHG Reduction (MT C02e)</b>	<b>2035 GHG Reduction (MT C02e)</b>	<b>Adaption &amp; Resiliency Program</b>
<b>Public Facilities and Services Element</b>				
<b>GOAL TM-1</b>				
<b>To maintain a comprehensive and coordinated multimodal transportation system that enhances the mobility of people, improves the environment, and is safe, efficient, and cost effective.</b>				
<b>TM-1.3 Multimodal System</b> The County shall encourage, where appropriate, development of an integrated, multi-modal transportation system that offers attractive choices among modes including pedestrianways, public transportation, roadways, bikeways, rail, waterways, and aviation, and reduces air pollution and greenhouse gas emissions. (RDR/PSP)		<b>Supporting</b>		
<b>TM-1.4 Regional Transportation Facilities</b> The County shall work with Caltrans, SJCOG, and the cities in the County where appropriate to plan, develop, and maintain regional transportation facilities, and to identify existing and future transportation corridors that should be linked across jurisdictional boundaries so that sufficient right-of-way may be preserved. (PSP/IGC)		<b>Supporting</b>		
<b>TM-1.5 Regional Transportation Plan Development</b> The County shall provide input into the development of the San Joaquin Council of Governments Regional Transportation Plan as appropriate to ensure County roads and facilities are adequately addressed. (PSP/IGC)		<b>Supporting</b>		
<b>TM-1.6 Automobile Dependency Alternatives</b> The County shall support public and private efforts where appropriate to provide alternative choices to single occupant driving. (IGC/JP)		<b>Supporting</b>		




## GENERAL PLAN SUSTAINABILITY POLICIES AND PROGRAMS

A-3: Sustainability Policies and Programs	2020 GHG Reduction (MT C02e)	2035 GHG Reduction (MT C02e)	Adaption & Resiliency Program
<b>TM-1.7 Energy Conservation</b> The County shall develop the transportation system to reduce vehicle miles traveled, conserve energy resources, minimize air pollution, and reduce greenhouse gas emissions. (RDR/PSP)	<b>Supporting</b>		
<b>TM-1.8 Multimodal Congestion Management</b> The County shall support, as appropriate, SJCOG efforts to monitor multimodal corridors within the County as part of the Regional Congestion Management Program. The County shall also encourage the consideration of additional multimodal corridors, where appropriate, as part of future updates to the Regional Congestion Management Program. (PSP/IGC)	<b>Supporting</b>		
<b>TM-1.10 Eliminate Gaps</b> The County shall strive to eliminate "gaps" in roadways, bikeways, and pedestrian networks by planning and seeking funding to construct grade-separated crossings of rail lines, canals, creeks, and other barriers to improve connectivity and encourage construction of new bikeways and pedestrianways in and between existing communities where appropriate. (RDR/PSP/FB)	<b>Supporting</b>		
<b>TM-1.12 Transportation and Land Use</b> The County shall ensure that transportation system investments and improvements support existing and future sustainable land use patterns. (RDR/PSP/FB)	<b>Supporting</b>		

A-3: Sustainability Policies and Programs	2020 GHG Reduction (MT C02e)	2035 GHG Reduction (MT C02e)	Adaption & Resiliency Program
<b>TM-1.13 Smart Growth</b> The County shall encourage “smart growth” and sustainable planning principles where appropriate, including the development of high-density and commercial development near inter-modal transit facilities. (RDR/PSP)	<b>Supporting</b>		

## GENERAL PLAN SUSTAINABILITY POLICIES AND PROGRAMS





A-3: Sustainability Policies and Programs	2020 GHG Reduction (MT C02e)	2035 GHG Reduction (MT C02e)	Adaption & Resiliency Program
<b>GOAL TM-2</b>			
<b>To improve County roadways to include pedestrian, bicycle, and transit facilities to better serve people who use these active transportation modes.</b>			
<p><b>TM-2.1 Urban Complete Streets</b></p> <p>The County shall require new streets within Urban Communities to be designed and constructed to serve all users, including pedestrians, bicyclists, and transit passengers, of all ages and abilities. This includes:</p> <ul style="list-style-type: none"> <li>▪ creating multi-modal street connections in order to establish a comprehensive, integrated, and connected transportation network for all modes of travel;</li> <li>▪ minimizing curb cuts along non-local streets to improve safety and capacity;</li> <li>▪ planting street trees adjacent to curbs and between the street and sidewalk to provide a buffer between pedestrians and vehicular traffic, where appropriate;</li> <li>▪ constructing sidewalks and bike lanes on both sides of streets, where feasible;</li> <li>▪ including parking options to provide a buffer between pedestrians and vehicular traffic, where appropriate;</li> <li>▪ coordinating with local jurisdictions and SJCOG to ensure multimodal connections are established and maintained between jurisdictions; and</li> <li>▪ incorporating traffic-calming devices such as roundabouts, bulb-outs at intersections, and traffic tables into the transportation system where appropriate to improve safety and encourage travel by active transportation modes. (RDR/PSP)</li> </ul>	779	1,095	

A-3: Sustainability Policies and Programs	2020 GHG Reduction (MT C02e)	2035 GHG Reduction (MT C02e)	Adaption & Resiliency Program
<b>TM-2.2 Reconstructed Urban Complete Streets</b> The County may require, based on community support and financial feasibility, reconstructed streets in Urban Communities to accommodate pedestrians and bicyclists, except where pedestrian or bicycle facility improvements are not feasible or determined to be cost prohibitive. New and reconstructed streets in Urban Communities shall be designed to create an environment that provides opportunities for pedestrian and bicycle activity and complementary development and land uses. (RDR/PSP)	Supporting <sup>1</sup>		
<b>TM-2.3 Land Use Patterns</b> The County shall encourage the development of uses in Urban Communities that support the use of public transit, bicycling, walking, and other alternatives to the automobile. (PSP)	Supporting <sup>1</sup>		
<b>TM-2.4 Rural Complete Streets</b> The County shall strive to serve all users on rural roadways in the County and shall design and construct rural roadways to serve safely bicyclists, transit passengers, and agricultural machinery operators. This includes: <ul style="list-style-type: none"> <li>▪ constructing wide shoulders to provide a safe space for bicyclists, and agricultural machinery vehicles;</li> <li>▪ removing visual barriers along rural roads, particularly near intersections, to improve the visibility of bicyclists; and</li> <li>▪ coordinating with local jurisdictions and SJCOG to ensure multimodal connections are established and maintained between jurisdictions. (RDR/PSP)</li> </ul>	Supporting <sup>1</sup>		






<sup>1</sup> Policies TM-2.1, TM-2.2, TM-2.3, TM-2.4, TM-2.6, and TM-2.7 are all directly related to Transportation Strategy 1: Complete Streets. All five of these policies contribute to the GHG reduction numbers shown for TM-2.1.








## GENERAL PLAN SUSTAINABILITY POLICIES AND PROGRAMS






A-3: Sustainability Policies and Programs		2020 GHG Reduction (MT C02e)	2035 GHG Reduction (MT C02e)	Adaption & Resiliency Program
<b>TM-2.6 Funding for Complete Streets</b> The County shall support efforts to fund transit agencies and improvements for public transit systems, bicycle and pedestrian routes, and other alternative modes of transportation. (PSP)		Supporting <sup>1</sup>		
<b>TM-2.7 New Development</b> The County shall require all new developments to provide their fair share of roadway facilities for alternative transportation modes to reduce automobile demand. (RDR)		Supporting <sup>1</sup>		
GOAL TM-4				
To maintain and expand a safe, continuous, and convenient bicycle system and pedestrian network.				
<b>TM-4.1 Pedestrian and Bicycle Network Continuity</b> The County shall strive to eliminate gaps in the rural bicycle network by constructing or designating new bike facilities, where appropriate, and in accordance with the San Joaquin County Bicycle Master Plan. (RDR/PSP/IGC)		Supporting		
<b>TM-4.5 Bicycle Storage</b> The County shall encourage bicycle storage facilities (i.e., bicycle racks, lockers) at all new major transportation terminals and employment centers consistent with Development Title, Section 9. (RDR)		Supporting		

<sup>1</sup> Policies TM-2.1, TM-2.2, TM-2.3, TM-2.4, TM-2.6, and TM-2.7 are all directly related to Transportation Strategy 1: Complete Streets. All five of these policies contribute to the GHG reduction numbers shown for TM-2.1.





A-3: Sustainability Policies and Programs	2020 GHG Reduction (MT C02e)	2035 GHG Reduction (MT C02e)	Adaption & Resiliency Program
<b>TM-4.6 Bicycle Route System</b> The County shall encourage bicycle facilities and routes in unincorporated areas to interface with city bicycle routes and provide for inter- and intra-county bicycle circulation. (RDR/PSP/IGC)	Supporting		
<b>TM-4.7 Bicycle Connectivity</b> The County shall support development of the bicycle system to connect residential areas with commercial areas, employment centers, educational facilities, local and regional recreational facilities, and other major attractions. (PSP)	Supporting		
<b>TM-4.8 Bicycle Route Facilities (RDR)</b> The County shall ensure County roads planned as part of the regional bicycle route network are constructed to have adequate width. (RDR/PSP)	Supporting		
<b>TM-4.9 Parking Facility Design</b> The County shall ensure that new automobile parking facilities are designed to facilitate safe and convenient pedestrian access, including clearly defined corridors and walkways connecting parking areas with buildings. (RDR/PSP)	Supporting		
<b>TM-4.11 Pedestrian Planning</b> The County shall consider the safety and accessibility of pedestrians when producing transportation plans, studies, and reports. (PSP/PSR)	Supporting		




## GENERAL PLAN SUSTAINABILITY POLICIES AND PROGRAMS

<b>A-3: Sustainability Policies and Programs</b>		<b>2020 GHG Reduction (MT C02e)</b>	<b>2035 GHG Reduction (MT C02e)</b>	<b>Adaption &amp; Resiliency Program</b>
<b>GOAL TM-5</b>				
<b>To maintain a public transit system that meets the needs of all County residents while providing a convenient, reliable alternative to automobile travel.</b>				
<b>TM-5.1 Transit for All</b> The County shall encourage a well-designed transit system that meets the transportation needs of San Joaquin County residents and visitors including seniors, the disabled, and transit-dependent persons. (PSP)		<b>Supporting</b>		
<b>TM-5.2 Maintain Services</b> The County shall encourage transit providers to maintain services within the County that are timely, cost-effective, and responsive to growth patterns and enhance transit where feasible. (PSP/IGC)		<b>Supporting</b>		
<b>TM-5.3 Variety of Transit Types</b> The County shall consider a variety of transit types including regional rail, bus rapid transit, regional and local buses, express buses, and neighborhood shuttles, to meet the needs of residents, workers, and visitors. (PSP)		<b>Supporting</b>		
<b>TM-5.4 Alternative to the Automobile</b> The County shall promote public and private transit systems in addition to the automobile. (PSP)		<b>Supporting</b>		
<b>TM-5.5 Access to Services</b> The County shall support the expansion of public transit service to provide County residents with access to commercial services (e.g., grocery stores) and other essential services, such as medical, social service, and personal business destinations. (PSP/IGC)		<b>Supporting</b>		











A-3: Sustainability Policies and Programs	2020 GHG Reduction (MT C02e)	2035 GHG Reduction (MT C02e)	Adaption & Resiliency Program
<b>TM-5.6 Unmet Needs</b> The County shall encourage the San Joaquin Council of Governments and San Joaquin Regional Transit to identify unmet transit needs and collaborate with appropriate agencies and entities to serve those who have no other reasonable alternatives for transportation. (PSP/IGC)	Supporting		
<b>TM-5.7 Intercity Bus Service</b> The County shall encourage the San Joaquin Regional Transit District and other regional bus service providers to support intercity bus service that connects all cities in San Joaquin County, as well as major passenger destinations, including airports and train stations. (PSP/IGC)	Supporting		
<b>TM-5.8 Increased Rail Frequency</b> The County shall encourage increased passenger rail service (e.g., Amtrak, ACE) frequency to the County. (PSP/IGC)	Supporting		
<b>TM-5.10 Multimodal Rail Stations</b> The County shall support the development of multi-modal rail stations in Stockton, Lodi, Manteca, and Tracy that include park and ride facilities, commuter bus service, express bus service, and/or cross-platform transfer capabilities. (PSP/IGC)	Supporting		
<b>TM-5.11 Amtrak Service</b> The County shall support Amtrak stations in all cities of the County. (PSP/IGC)	Supporting		











## GENERAL PLAN SUSTAINABILITY POLICIES AND PROGRAMS

<b>A-3: Sustainability Policies and Programs</b>		<b>2020 GHG Reduction (MT C02e)</b>	<b>2035 GHG Reduction (MT C02e)</b>	<b>Adaption &amp; Resiliency Program</b>
<b>GOAL TM-6</b>				
<b>To maintain congestion management strategies to reduce single-occupant automobile use.</b>				
<b>TM-6.3 Transportation Demand Management</b> The County shall support efforts by the San Joaquin Council of Governments Commute Connections to facilitate implementation of the Federal Requirement established in Rule 9410 (eTRIP rule). (PSP/IGC)		<b>Supporting</b>		
<b>TM-6.4 Park-and-Ride Facilities</b> The County shall support implementation of the San Joaquin Council of Governments Park and Ride Plan and collaborate with Caltrans to identify locations for future park-and-ride lots to facilitate more carpooling, vanpooling, and transit use. (PSP/IGC)		<b>Supporting</b>		
<b>TM-6.6 Bicycle Facilities at Park-and-Ride Lots</b> The County shall encourage bicycling to park-and-ride lots through the provision of bicycle facilities such as bicycle parking. (RDR)		<b>Supporting</b>		
<b>TM-6.7 Bicyclist Amenities</b> The County shall encourage new large employers to provide bicycle racks. (RDR)		<b>Supporting</b>		
<b>GOAL TM-7</b>				
<b>To maintain an efficient transportation network to facilitate the movement of goods within and through the County.</b>				

A-3: Sustainability Policies and Programs		2020 GHG Reduction (MT C02e)	2035 GHG Reduction (MT C02e)	Adaption & Resiliency Program
TM-7.4 Intermodal Freight Facilities The County shall continue to encourage the modernization and expansion of intermodal freight facilities that support goods movement by rail and improve the efficiency of goods movement among various types of transport (e.g., truck to rail). (RDR/PSP)		Supporting		
GOAL IS-1				
To provide residents and businesses quality, cost-effective, and sustainable public facilities and services.				
IS-1.11 Adaptive Facilities and Services  The County shall monitor expected impacts of climate change on public facilities and services and make appropriate adaptive modifications and upgrades as needed. Where public facilities and services are provided by other agencies, the County shall assist with identifying impacts and solutions. (PSP)		Supporting		







## GENERAL PLAN SUSTAINABILITY POLICIES AND PROGRAMS




A-3: Sustainability Policies and Programs	2020 GHG Reduction (MT C02e)	2035 GHG Reduction (MT C02e)	Adaption & Resiliency Program
<b>GOAL IS-3</b>			
<b>To increase efficiency of County facilities, services, and operations to conserve resources and reduce greenhouse gas emissions.</b>			
<b>IS-3.1 Efficient Operations</b>  The County shall maintain County facility and operation standards in a manner that meets community needs, conserves resources, and reduces the County's contribution to greenhouse gas emissions. (SO)	<b>Supporting</b>		
<b>IS-3.2 Sustainable Plans and Operations</b>  The County shall integrate sustainability concepts, greenhouse gas reduction strategies, and climate change resiliency planning into County facility and service plans and operations. (PSP/SO)	<b>Supporting</b>		
<b>IS-3.3 Energy Efficiency Retrofits</b>  The County shall increase energy efficiency in older County buildings through energy efficiency and retrofits, renewable energy generation, and water conservation retrofits. (SO)	<b>Supporting</b>		
<b>IS-3.4 New Energy Efficient Buildings</b>  When building new facilities, the County shall achieve a high standard (e.g., equivalent to LEED® certification) of energy efficiency and water conservation, and employ renewable energy technologies. (SO)	<b>Supporting</b>		
<b>IS-3.5 New Fleet and Equipment Purchases</b>  The County shall purchase lower-emission and/or electric vehicles and energy efficient equipment when purchasing new fleet vehicles and maintenance/construction equipment. (SO)	<b>Supporting</b>		

A-3: Sustainability Policies and Programs	2020 GHG Reduction (MT C02e)	2035 GHG Reduction (MT C02e)	Adaption & Resiliency Program
<b>IS-3.6 Clean Energy and Fuel Sources</b>  The County shall use available clean energy and fuel sources where feasible to operate its buildings, vehicles, and maintenance/construction equipment. (SO)	<b>Supporting</b>		
<b>IS-3.7 County Employee Actions</b>  The County shall encourage its employees to reduce vehicle idling, reduce trips, establish efficient routing, and use public transportation, carpooling, and alternate modes of transportation when available to reduce energy consumption and costs. (SO)	<b>Supporting</b>		
<b>IS-3.8 Purchasing Preferences</b>  The County shall use Environmentally Preferable Purchasing (EPP), where feasible, when carrying out operations and activities, including giving preference to products that reduce or eliminate indirect greenhouse gas emissions and promote recycling. (SO)	<b>Supporting</b>		
<b>IS-3.9 Contractor Preference</b>  The County shall encourage contractors to use reduced emission equipment for County construction projects and contracts for services, as well as businesses which practice sustainable operations. (SO)	<b>Supporting</b>		
<b>IS-3.10 County Recycling</b>  The County shall expand opportunities for recycling at all County facilities, increase recycling and waste diversion by County employees, and use recycled materials and products where economically feasible. (SO)	<b>Supporting</b>		










## GENERAL PLAN SUSTAINABILITY POLICIES AND PROGRAMS

A-3: Sustainability Policies and Programs	2020 GHG Reduction (MT C02e)	2035 GHG Reduction (MT C02e)	Adaption & Resiliency Program
<b>IS-4.18 Graywater and Rainwater Systems</b>  The County shall encourage homeowners, businesses, and developers to install graywater systems and rainwater harvest systems, consistent with local and State guidelines, regulations, and standards, in order to reduce consumption of potable water. (RDR/PSP)	<b>Supporting</b>		
<b>IS-4.19 Water Efficient Landscaping</b>  The County shall encourage water efficient landscaping and use of native, drought-tolerant plants consistent with the Model Landscape Ordinance. (RDR)	<b>Supporting</b>		
<b>IS-4.20 Water Efficient Agricultural Practices</b>  The County shall encourage farmers to implement irrigation practices, where feasible and practical, to conserve water. (PSP)	<b>Supporting</b>		





A-3: Sustainability Policies and Programs	2020 GHG Reduction (MT C02e)	2035 GHG Reduction (MT C02e)	Adaption & Resiliency Program
<b>3.2 Public Health and Safety Element</b>			
<b>GOAL PHS-1</b>			
To maintain a level of disaster preparedness necessary for the protection of public and private property, and the health, safety, and welfare of people living and working in San Joaquin County.			
<b>PHS-1.11 Climate Change Monitoring and Adaptation</b> The County shall develop and implement a program to monitor the impacts of climate change and use adaptive management to develop new strategies and modify existing strategies to respond to the impacts of climate change. (PSP)	Supporting		
<b>PHS-1.12 Interagency Coordination</b> The County shall coordinate with cities, regional, State, and Federal agencies and organizations to develop a comprehensive approach to planning for climate change. (PSP/IGC)	Supporting		
<b>PHS-1.13 Public Awareness of Climate Change</b> The County shall support public awareness of water conservation measures, agricultural changes, storm and flood preparedness, wildfire fire protection, air quality effects, extreme weather events, heat and human health, and disease prevention to help prepare for the potential impacts of climate change. (PI)	Supporting		






## GENERAL PLAN SUSTAINABILITY POLICIES AND PROGRAMS

A-3: Sustainability Policies and Programs	2020 GHG Reduction (MT C02e)	2035 GHG Reduction (MT C02e)	Adaption & Resiliency Program
<b>GOAL PHS-2</b>			
<b>To protect people and property from flood hazards.</b>			
<b>PHS-2.1 Restricted Uses in Designated Floodways</b> The County shall restrict uses in designated floodways except those that do not adversely affect flood elevations or velocities, and are tolerant of occasional flooding in accordance with the County's Floodplain Management Ordinance. (RDR/PSP)	<b>Supporting</b>		
<b>PHS-2.2 Primary Purpose of Levees</b> The County shall ensure that the primary use and purpose of levees is flood protection. The County shall only allow other uses of levees if they are compatible with the primary purpose of the levee and do not reduce the flood protection integrity, provided such uses are in compliance with State and Federal regulations. (RDR)	<b>Supporting</b>		
<b>PHS-2.3 Evaluation of Flood Protection for New Development</b> The County shall require evaluation of potential flood hazards prior to approval of new development projects to determine whether the proposed development is reasonably safe from flooding, and shall approve such development consistent with applicable State and Federal laws. (PSP)	<b>Supporting</b>		
<b>PHS-2.4 Flood Protection for Existing Development</b> The County shall investigate and implement, when feasible, mitigation measures that offer protection for existing development within flood prone areas, and shall strive to achieve 200-year level of flood protection for urban areas, and 100-year level protection for non-urban areas, where feasible. (PSP)	<b>Supporting</b>		





A-3: Sustainability Policies and Programs	2020 GHG Reduction (MT C02e)	2035 GHG Reduction (MT C02e)	Adaption & Resiliency Program
<b>PHS-2.5 Planned Land Use</b> The County shall update, as necessary, the Land Use Element to reflect current floodplain mapping data. (PSP)	Supporting		
<b>PHS-2.6 Use Best Available Information</b> The County should consider the best available flood hazard information and mapping from regional, State, and Federal agencies, and use this information to inform land use and public facilities investment decisions. (PI)	Supporting		
<b>PHS-2.7 Preservation of Floodway and Floodplains</b> The County shall preserve floodways and floodplains for non-urban uses in an effort to maintain existing flood carrying capacities, except that development may be allowed in floodplains with mitigation measures that are in conformance with the County's floodplain management ordinance. (RDR)	Supporting		
<b>PHS-2.8 Levee Setbacks and Easements for New Development</b> The County shall require setbacks and easements for access to levees and channels, where feasible, from new development. On County-owned land, the County shall also provide unobstructed access, where feasible, to levees for maintenance and flood fighting purposes. (RDR)	Supporting		
<b>PHS-2.9 Dedication of Levee Footprint</b> The County shall require new development adjacent to an existing or planned levee to dedicate the levee footprint and necessary setback areas in a manner acceptable to the appropriate levee maintaining agency and in compliance with federal and state standards. (RDR)	Supporting		





## GENERAL PLAN SUSTAINABILITY POLICIES AND PROGRAMS

<b>A-3: Sustainability Policies and Programs</b>	<b>2020 GHG Reduction (MT C02e)</b>	<b>2035 GHG Reduction (MT C02e)</b>	<b>Adaption &amp; Resiliency Program</b>
<b>PHS-2.10 Levee and Channel Maintenance</b> The County's Flood Control District shall prioritize levee and channel maintenance to ensure the most efficient use of available funding to reduce flood risk, and shall encourage reclamation districts and other levee maintaining agencies to employ similar practices. (RDR)	<b>Supporting</b>		
<b>PHS-2.11 Delta Emergency Flood Response</b> The County shall continue to work with the Delta Working Group to improve local emergency preparedness and response within the Delta. (IGC)	<b>Supporting</b>		
<b>PHS-2.12 Permits for Levee Encroachments</b> The County shall require applicants to obtain appropriate permits for any project that falls within the jurisdiction of other local, State and Federal agencies. (RDR)	<b>Supporting</b>		
<b>PHS-2.13 Multi-Purpose Flood Control Projects</b> The County shall encourage multi-purpose flood control projects, to the extent feasible, that incorporate recreation, resource conservation, and preservation of natural riparian habitat and scenic values of the County's waterways, creeks, and lakes. (PSP)	<b>Supporting</b>		
<b>PHS-2.14 Climate Change Impacts to Flood Control Facilities</b> The County shall coordinate with local, regional, State, and Federal agencies to define existing and potential flood problem areas associated with expected impacts from climate change and develop strategies to improve and maintain flood control facilities accordingly. (IGC/PSR)	<b>Supporting</b>		

A-3: Sustainability Policies and Programs	2020 GHG Reduction (MT C02e)	2035 GHG Reduction (MT C02e)	Adaption & Resiliency Program
<b>PHS-2.15 Seismic Impacts to Flood Control Facilities</b> The County shall comply with state and federal requirements to improve and maintain flood control facilities to withstand seismic and geologic impacts. (PSP)	Supporting		
<b>PHS-2.16 Establish Cooperative Working Relationships</b> The County shall strive to establish and maintain cooperative working relationships among local, regional, State, and Federal agencies with responsibility for flood management to help minimize flood hazards and improve safety. (IGC)	Supporting		
<b>PHS-2.17 Levee Compliance</b> The County shall support the efforts of levee owners and local, regional, State, and Federal agencies to design and reconstruct levees that do not meet adopted State and/or Federal flood protection standards to bring them into compliance. (IGC)	Supporting		
<b>PHS-2.18 Collaborate to Develop Funding Mechanisms</b> The County shall collaborate with State and local flood management agencies and other interested parties to develop funding mechanisms to finance local share of flood management responsibilities. (IGC)	Supporting		
<b>PHS-2.19 Countywide Dam Failure and Flood Plans</b> The County shall maintain and implement the following emergency management plans for the safe evacuation of people from areas subject to inundation from levee and dam failure <ul style="list-style-type: none"> <li>▪ San Joaquin County Flood Evacuation Plan, and</li> <li>▪ Dam Failure Plan. (RDR/PSP) (Source: New Policy)</li> </ul>	Supporting		





## GENERAL PLAN SUSTAINABILITY POLICIES AND PROGRAMS

A-3: Sustainability Policies and Programs	2020 GHG Reduction (MT C02e)	2035 GHG Reduction (MT C02e)	Adaption & Resiliency Program
<b>PHS-2.20 Flood Evacuation Maps</b> The County shall continue maintain and make available to the public, as appropriate, community flood evacuation maps. (PI)	Supporting		
<b>PHS-2.21 Public Information Programs</b> The County shall continue to inform the public about the specific risks of living in flood prone areas and provide residents instructional information on how to take steps to reduce their exposure to flood damages. (PI)	Supporting		
<b>PHS-2.22 National Flood Insurance Program.</b> The County shall continue to participate in the National Flood Insurance Program including: <ul style="list-style-type: none"> <li>▪ maintaining at least the minimum National Flood Insurance Program requirements, and adopt more stringent standards to further promote sound flood plain management when appropriate;</li> <li>▪ promoting the purchase of flood insurance;</li> <li>▪ undertaking outreach campaigns to inform the public of the risk of flooding; and</li> <li>▪ coordinating with Federal, State, and local agencies on efforts to enhance the effectiveness of the implementation of the National Flood Insurance Program. (RDR/PSP/PI/IGC)</li> </ul>	Supporting		
<b>PHS-2.23 Flood Mapping Information Program</b> The County shall continue to provide the public with information related to Federal Emergency Management Agency floodplain and Flood Insurance Rate Maps. (PI)	Supporting		




<b>A-3: Sustainability Policies and Programs</b>		<b>2020 GHG Reduction (MT C02e)</b>	<b>2035 GHG Reduction (MT C02e)</b>	<b>Adaption &amp; Resiliency Program</b>
<b>GOAL PHS-5</b>				
<b>To protect public health, agricultural crops, scenic resources, and the built and natural environments from air pollution.</b>				
<b>PHS-5.7 TAC Exposure Reduction Measures for New Development</b> The County shall require new development projects to implement all applicable best management practices that will reduce exposure of sensitive receptors (e.g., hospitals, schools, daycare facilities, elderly housing and convalescent facilities) to toxic air contaminants. (TAC)		<b>Supporting</b>		
<b>PHS-5.8 Minimize Motor Vehicle Emissions</b> The County shall strive to minimize motor vehicle emissions through land use and transportation strategies, as well as by promotion of alternative fuels. (PSP)		<b>Supporting</b>		
<b>PHS-5.14 Energy Consumption Reduction</b> The County shall encourage new development to incorporate green building practices and reduce air quality impacts from energy consumption. (RDR)		<b>Supporting</b>		
<b>GOAL PHS-6</b>				
<b>To reduce greenhouse gas emissions as part of the Statewide effort to combat climate change.</b>				
<b>PHS-6.1 Municipal GHG Reduction Targets</b> The County shall reduce GHG emissions from County facilities and activities by 15 percent below 2007 levels by 2020, and shall strive to reduce GHG emissions 40 percent and 80 percent below reduced 2020 levels by 2035 and 2050, respectively. (SO)		<b>Supporting</b>		



## GENERAL PLAN SUSTAINABILITY POLICIES AND PROGRAMS








A-3: Sustainability Policies and Programs	2020 GHG Reduction (MT C02e)	2035 GHG Reduction (MT C02e)	Adaption & Resiliency Program
<b>PHS-6.2 Community GHG Reduction Targets</b> The County shall reduce community greenhouse gas emissions by 15 percent below 2005 levels by 2020, and shall strive to reduce GHG emissions by 40 percent and 80 percent below reduced 2020 levels by 2035 and 2050, respectively. (RDR/PSP)	Supporting		
<b>PHS-6.3 GHG Reduction Strategies</b> The County shall promote greenhouse gas emission reductions by encouraging efficient farming methods (e.g., no-till farming, crop rotation, cover cropping); supporting the installation of renewable energy technologies; and protecting grasslands, open space, oak woodlands, riparian forest and farmlands from conversion to urban uses. (PSP)	Supporting		
<b>PHS-6.4 Methane Digesters</b> The County shall encourage large dairies to capture methane through use of manure digester systems to generate an alternative source of energy, reduce greenhouse gas emissions, and serve as a source of profit for agricultural operations. (PSP)	Supporting <sup>1</sup>		
<b>PHS-6.5 Diversion, Recycling, and Reuse</b> The County shall achieve a 75 percent diversion of landfilled waste based on 1990 levels by 2020, and shall achieve a diversion rate of 90 percent by 2035. (PSP)	35,507	50,207	

<sup>1</sup> This policy directly supports GHG Reduction Strategy 5: Manure Management and contributes to the GHG reduction shown for Implementation Program PHS-N.







A-3: Sustainability Policies and Programs	2020 GHG Reduction (MT C02e)	2035 GHG Reduction (MT C02e)	Adaption & Resiliency Program
<p><b>PHS-6.6 Business-related GHG Reduction Strategies</b></p> <p>The County shall encourage all businesses to help reduce GHG emissions by: replacing high mileage fleet vehicles with more efficient and/or alternative fuel vehicles; increasing the energy efficiency of facilities; transitioning toward the use of renewable energy instead of non-renewable energy sources; adopting purchasing practices that promote emissions reductions and reusable materials; and increasing recycling. (RDR/PSP)</p>	Supporting		
<p><b>PHS-6.7 New Development</b></p> <p>The County shall require new development to incorporate all feasible mitigation measures to reduce construction and operational GHG emissions. (RDR)</p>	Supporting		
<p><b>PHS-6.8 Agricultural Equipment and Emissions</b></p> <p>The County shall implement the following measures pertaining to agricultural equipment and emissions reductions:</p> <ul style="list-style-type: none"> <li>• Support SJVAPCD programs to fund equipment upgrades, retrofits, and replacement through the Carl Moyer heavy-duty vehicle and equipment program or other funding mechanisms (e.g., Rule 9510).</li> <li>• Work with SJVAPCD and stakeholders to identify practical and feasible options for fuel-efficient agricultural equipment.</li> <li>• Work with agricultural organizations and stakeholders to provide workshops and presentations and outreach materials focused on promoting fuel efficient farm equipment and operations and encourage participation in the Carl Moyer incentive program. (IGC/PI)</li> </ul>	864	864	

## GENERAL PLAN SUSTAINABILITY POLICIES AND PROGRAMS









A-3: Sustainability Policies and Programs	2020 GHG Reduction (MT C02e)	2035 GHG Reduction (MT C02e)	Adaption & Resiliency Program
<p><b>PHS-6.9 Public Awareness</b></p> <p>The County shall support public awareness about climate change and encourage County residents and businesses to become involved in activities and lifestyle changes that will aid in reduction of greenhouse gas emissions through alternative energy use, energy and water conservation, waste reduction and recycling, and other sustainable practices. (PSP)</p>	Supporting		

A-3: Sustainability Policies and Programs	2020 GHG Reduction (MT C02e)	2035 GHG Reduction (MT C02e)	Adaption & Resiliency Program
<b>3.4 Natural and Cultural Resources Element</b>			
<b>GOAL NCR-3</b>			
To ensure the quality of water for municipal and industrial uses, agriculture, recreation, and fish and wildlife.			
<b>NCR-3.1 Preserve Groundwater Recharge Areas</b>  The County shall strive to ensure that substantial groundwater recharge areas are maintained as open space. (PSP)	Supporting		
<b>NCR-3.2 Groundwater Recharge Projects</b> The County shall encourage the development of groundwater recharge projects of all scales within the County and cities to increase groundwater supplies. (PSP)	Supporting		
<b>NCR-3.3 Multi-Jurisdictional Groundwater Management Evaluation</b> The County shall support multi-jurisdictional groundwater management that involves adjacent groundwater basins. (IGC)	Supporting		
<b>NCR-3.4 Eliminate Pollution</b> The County shall support efforts to eliminate sources of pollution and clean up the County's waterways and groundwater. (PSP)	Supporting		
<b>NCR-3.5 Low Impact Development</b>  The County shall require new development to minimize or eliminate stormwater quality and hydro-modification impacts through site design, source controls, runoff reduction measures, best management practices (BMPs), and Low Impact Development (LID). (RDR)	Supporting		





## GENERAL PLAN SUSTAINABILITY POLICIES AND PROGRAMS







<b>A-3: Sustainability Policies and Programs</b>		<b>2020 GHG Reduction (MT C02e)</b>	<b>2035 GHG Reduction (MT C02e)</b>	<b>Adaption &amp; Resiliency Program</b>
<b>GOAL NCR-5</b>				
<b>To increase energy independence through the use of renewable energy sources and improved energy conservation and efficiency.</b>				
<b>NCR-5.1 Nonrenewable Energy and Energy Efficiency</b> The County shall support the efforts of residents, businesses, and energy providers to reduce the consumption of nonrenewable energy and shall promote energy providers' programs to increase energy efficiency and implement demand response programs. (PSP)		<b>Supporting<sup>1</sup></b>		
<b>NCR-5.2 Alternative Energy</b> The County shall encourage residents, businesses, and energy providers to develop and use alternative, renewable energy sources, including but not limited to, biomass, solar, wind, and geothermal. (RDR/PSP)		<b>9,685</b>	<b>11,412</b>	
<b>NCR-5.3 Solar Facility Ordinance</b> The County shall prepare and maintain an ordinance that guides the permitting, construction, operation, and decommissioning of large-scale solar energy facilities. (RDR)		<b>Supporting</b>		
<b>NCR-5.4 Biomass-to-Energy Production</b> The County shall encourage the use of biomass facilities to capture untapped local energy sources from dairies, farmland, and other industrial sources. (PSP)		<b>Supporting</b>		
<b>NCR-5.5 Environmental Protection</b> The County shall strive to balance the development of energy facilities with environmental protection and the preservation of other natural resources. (RDR)		<b>Supporting</b>		
<b>NCR-5.7 Passive Solar Energy</b> The County shall encourage new residential subdivisions to provide maximum opportunities for passive heating and cooling. (RDR)		<b>Supporting</b>		

<sup>1</sup> Policies NCR-5.1 and NCR-5.2, and Implementation Programs NCR-L and NCR-P are all directly related to Energy Strategy 2: Participation in PG&E Renewable Energy. All four of these policies/implementation programs contribute to the GHG reduction numbers shown for NCR-5.2.

A-3: Sustainability Policies and Programs	2020 GHG Reduction (MT C02e)	2035 GHG Reduction (MT C02e)	Adaption & Resiliency Program
<b>NCR-5.8 Clustered Residential Development</b> The County shall encourage clustered developments and common walls to reduce energy demand in residential development. (RDR)	Supporting		
<b>NCR-5.10 Energy Conservation in Existing Residential Structures</b> The County shall encourage energy conservation measures, such as insulation and weather-stripping, in existing residential structures. (RDR)	Supporting		
<b>NCR-5.11 Green Building Practices</b> The County shall encourage green building practices in new construction. (RDR)	Supporting		
<b>NCR-5.12 Energy Efficient Industry</b> The County shall support energy efficiency of industrial processes. (PSP)	Supporting		
<b>NCR-5.13 Solar Heating in Industrial Operations</b> The County shall encourage Industrial operations that require large amounts of hot water to incorporate active solar systems in the design of buildings. (RDR)	Supporting		
<b>NCR-5.14 Natural Daylighting in Commercial Operations</b> The County shall encourage commercial and employment operations to incorporate natural daylighting by the use of windows and skylights to reduce energy demand for lighting. (RDR)	Supporting		
Implementation Programs			
<b>ED-B: Monitor Jobs/Housing Ratio.</b> The County shall work with the cities in the County to monitor the ratio of employment opportunities to housing, and report annually to the Board of Supervisors on the jobs/housing balance. (PSR)	Supporting		
<b>IS-C: Sustainability Master Plan.</b> The County shall prepare and adopt a Sustainability Master Plan that guides County efforts to incorporate sustainability strategies (e.g., energy efficiency, water conservation, waste reduction/recycling, purchasing preferences) into its facilities, operations, and activities. (PSP/SO)	Supporting		

## GENERAL PLAN SUSTAINABILITY POLICIES AND PROGRAMS

A-3: Sustainability Policies and Programs	2020 GHG Reduction (MT C02e)	2035 GHG Reduction (MT C02e)	Adaption & Resiliency Program
<b>IS-I: Best Management Practices.</b> The County shall prepare and adopt updated low-impact development (LID) standards and best management practices (BMPs) for new development projects as part of its stormwater management and grading ordinance. These standards and BMPs will ensure compliance with National Pollutant Discharge Elimination System (NPDES) Phase 1 and Phase 2 Municipal Separate Storm Sewer System programs (MS4). It will also encourage alternative storm water management systems, natural drainage systems and LID approaches to managing stormwater that improve water quality. (RDR)	Supporting		
<b>IS-K: Waste-to-Energy.</b> The County shall prepare a study on the feasibility of developing a waste-to-energy facility, including a methane gas recovery operation. Based on findings from the study, the County shall make recommendations to the Board of Supervisors for follow-up implementation. (PSR)	Supporting		
<b>PHS-F: Climate Change Information Program.</b> The County shall prepare brochures and fliers, and provide information on its website to inform citizens of the potential impacts of climate change and how they can prepare for those impacts. Specifically, the promotional materials shall include information on the impacts of heat on human health. (PI)	Supporting		
<b>PHS-Q: Agricultural Best Practices Implementation.</b> To implement best practices, the County shall work with agricultural organizations and stakeholders to: <ul style="list-style-type: none"> <li>▪ create an outreach program to inform farmers about ways to: reduce fertilizer application with minimal to no effects on crop yield; reduce agricultural burning; and manage the collection and processing of manure and animal waste; and</li> <li>▪ develop an outreach and incentives program (e.g., rebate opportunities, waive permit fees, registration amnesty program) to encourage farmers to improve the efficiency of irrigation pumps. (IGC/PI)</li> </ul>	23,966	23,966	

A-3: Sustainability Policies and Programs	2020 GHG Reduction (MT C02e)	2035 GHG Reduction (MT C02e)	Adaption & Resiliency Program
<b>PHS-R: Monitor GHG Emissions.</b> The County shall monitor GHG emissions a minimum of every five years and verify results of meeting the GHG emission reduction targets and goals. (PSR)	<b>Supporting</b>		
<b>NCR-F: Renewable Energy/PACE Program.</b> The County shall develop and implement an incentive program to encourage the installation of solar hot water heaters and solar PV on existing and new developments. The County shall establish a Property Assessed Clean Energy (PACE) (AB 811) program for residential and commercial energy efficiency retrofit projects. (PSP)	<b>25,193</b>	<b>41,074</b>	
<b>NCR-G: Remove Barriers to Renewable Energy.</b> The County shall review and revise, as necessary, building and development codes and the Development Title and remove or otherwise address barriers to renewable energy production. (RDR)	<b>Supporting<sup>1</sup></b>		
<b>NCR-H: Solar Energy Ordinance.</b> The County shall develop, adopt, and implement an ordinance that guides the construction, installation, operation, and decommissioning of solar energy facilities. The ordinance shall describe where solar energy facilities are permitted within the County and the approval process. The ordinance shall provide for the protection of agricultural and biological resources. (RDR)	<b>Supporting</b>		
<b>NCR-I: Review of Energy Consumption of County Operations.</b> The County shall annually review and report on County energy consumption performance and identify programs and techniques to increase its energy efficiency. (PSR)	<b>Supporting</b>		
<b>NCR-J: Government Automobiles.</b> As vehicles come up for replacement, the County shall evaluate the feasibility of replacing them with hybrids, alternative fuel, or smaller and more energy-efficient vehicles. (SO)	<b>Supporting</b>		

<sup>1</sup> Policies NCR-5.1 and NCR-5.2, and Implementation Programs NCR-I and NCR-M are all directly related to Energy Strategy 2: Participation in PG&E Renewable Energy. All four of these policies/implementation programs contribute to the GHG reduction numbers shown for NCR-5.2.



## GENERAL PLAN SUSTAINABILITY POLICIES AND PROGRAMS

A-3: Sustainability Policies and Programs	2020 GHG Reduction (MT C02e)	2035 GHG Reduction (MT C02e)	Adaption & Resiliency Program
<b>NCR-K: Industrial Design Standards.</b> The County shall establish standards to incorporate design features that use renewable energy sources in commercial, industrial, and agricultural uses. These standards may include orientation of structures for solar energy use, orientation or provision of adequate structural support for solar collectors, or use of cogeneration facilities. (RDR)	Supporting <sup>1</sup>		

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