

**City of Sunnyvale Climate Action Plan - Implementation Matrix**  
Horizon 2035 Steering Committee Meeting, November 2-3, 2011

#	Policy Topic	City Costs	City Savings	Community Costs	Community Savings	Responsible Agencies	Applicability	Compliance	Community Benefits		Performance Indicators	
<b>Open Space and Urban Forestry (OS)</b> Provide local open space resources that support natural processes and provide rest, relaxation, and recreation opportunities.												
OS-1	Open Space.	Very High	Minimal	Unknown	Unknown	Community Services	New & Existing Development	Voluntary	Improves Public Health	Provides Educational Opportunities	Improves Mobility	New acres of park land
OS-2	Outdoor Meeting Space.	Minimal	Minimal	Minimal	Minimal	Community Services	New Development	Voluntary	Improves Public Health	Provides Educational Opportunities	--	n/a
OS-3	Urban Forestry.	Medium	Low	Low	Medium	Public Works	New & Existing Development	Mandatory for New, Voluntary for Existing	Improves Public Health	Reduces Energy Demand	Adaptation Measure	Trees planted per year
<b>Decrease Energy Consumption (EC)</b> Improve energy efficiency and conservation in the community and City operations.												
EC-1	Lighting Efficiency.	Unknown	Medium-High	Minimal	Minimal	Public Works	Municipal	Voluntary	Reduces Energy Demand	--	--	Percent of City streetlights replaced with LED
EC-2	New Construction and Remodels.	Low	Unknown	High	High	Community Development	New Development	Mandatory	Reduces Energy Demand	Supports Local Economy	Reduces Water Consumption	Compliance with Green Building Ordinance and CALGreen
EC-3	Residential Energy Efficiency	Medium-High	Minimal	Very high	Very high	Community Development	Existing Development	Mandatory	Reduces Energy Demand	Supports Local Economy	Provides Community Savings	Percent of homes and businesses that response to energy audits and percent that participate in a PACE program
EC-4	Commercial Energy Efficiency	High	Unknown	Very High	Very High	Community Development	New & Existing Development	Mandatory	Reduces Energy Demand	Adaptation Measure	--	Percent of commercial properties retrofitted upon sale and percent of businesses that participate in PACE
EC-5	Smart Grid	Low	Minimal	Low-Mid	Very high	Community Development	New & Existing Development	Mandatory for New, Voluntary for Existing	Reduces Energy Demand	Provides Community Savings	--	Percent of new and existing homes and businesses that participate in monitoring program

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EC-6	"Cool" Roofs and Pavements.	Low	Unknown	Minimal	Medium-High	Community Development	New Development	Mandatory	Reduces Energy Demand	--	--	All new parking lots, crosswalks, and sidewalks are made of high albedo content
<b>Provide a Sustainable Energy Portfolio (EP)</b> Increase the amount of renewable energy produced in the city and facilitate a higher renewable mix for energy delivered to the city.												
EP-1	Renewable Energy Portfolio.	Low-Mid	Unknown	Minimal	Minimal	Community Services	New & Existing Development	Voluntary	Adaptation Measure	--	--	60% "light green" participants 20% "dark green" participants "Light green" option delivers 50% renewable energy "Dark green" option delivers 100% renewable energy
EP-2	Local Small-Scale Renewable Energy.	Low	Minimal	Very high	Very high	Community Development	New & Existing Development	Voluntary	Reduces Energy Demand	Provides Community Savings	Adaptation Measure	Residential and non-residential participation rates
<b>Decrease Water Consumption (WC)</b> Reduce water-related greenhouse gas emissions through reclamation, conservation, and improvements to the water and wastewater processes.												
WC-1	Water GHG content.	Very High	Low	Unknown	Low-Mid	Community Services	New & Existing Development	Mandatory for New, Voluntary for Existing	Reduces Water Consumption	Reduces Energy Demand	Adaptation Measure	Annual reclaimed water use
WC-2	Water Conservation.	Low	Minimal	Medium	Very high	Community Development	New Development	Mandatory	Reduces Water Consumption	Adaptation Measure	--	Percent of new development will be required to reduce indoor and outdoor water consumption
<b>Reduce Landfilled Waste (LW)</b> Decrease the amount of waste sent to landfill through increased recycling, composting, and materials management.												
LW-1	Materials Management.	Low-Mid	Minimal	Unknown	Unknown	Community Development	New & Existing Development	Mandatory	Adaptation Measure	--	--	n/a
LW-2	Recycling and Composting.	Medium	Minimal	Unknown	Unknown	Community Services	New & Existing Development	Mandatory	--	--	--	Per capita disposal rates or overall diversion rate

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<b>Off-Road Equipment (OR)</b> Minimize emissions from off-road lawn and garden and construction equipment.												
OR-1	Lawn and Garden Equipment	Low	Minimal	Unknown	Minimal	Community Development	New & Existing Development	Voluntary	Provides Community Savings	--	--	Percent of lawnmowers and leaf blowers exchanged
OR-2	Construction Equipment	Minimal	Minimal	Unknown	Unknown	Community Development	New Development	Mandatory	Improves Public Health	--	--	Percent of equipment that is fuel efficient and/or alternatively fueled. Idling restrictions.
<b>Increase and Retain Awareness of Sustainability Issues (CA)</b> Community members are knowledgeable about GHG Emissions and are all taking actions to reduce them.												
CA-1	Community Outreach and Involvement.	Medium-High	Minimal	Minimal	Minimal	Community Development	Other	Voluntary	Provides Educational Opportunities	--	--	Number of community events related to sustainability
CA-2	School Education and Involvement.	Medium	Minimal	Minimal	Minimal	Community Development	Other	Voluntary	Provides Educational Opportunities	--	--	Number of school outreach events conducted
<b>Improve Mobility through Land Use Planning (LUP)</b> Utilize land use and planning tools to reduce or eliminate vehicle trips while still completing the activities of our everyday lives.												
LUP-1	Parking.	Medium	Unknown	Unknown	Unknown	Community Development	New Development	Mandatory	Improves Mobility	--	--	Percent reduction in parking provision compared to a parking generation rate \$10 monthly parking cost
LUP-2	Transit-Oriented, Higher Density, Mixed-Use Development.	Unknown	Minimal	Minimal	Minimal	Community Development	New Development	Mandatory	Improves Public Health	Improves Mobility	Supports Local Economy	Percent of new housing units are deed-restricted below market rate
LUP-3	Local Commerce and Food.	Low	Minimal	Minimal	Minimal	Community Development	New & Existing Development	Voluntary	Improves Public Health	Provides Community Savings	--	N/A
LUP-4	Jobs/Housing Balance.	Unknown	Unknown	Unknown	Unknown	Community Development	New & Existing Development	Voluntary	Supports Local Economy	--	--	Jobs to housing ratio
LUP-5	Distributed Services.	Low	Minimal	Minimal	Minimal	Community Development	New & Existing Development	Voluntary	Improves Mobility	Supports Local Economy	--	N/A

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<b>Expand Sustainable Circulation and Transportation Options (CTO)</b> Modify the transportation infrastructure such that bicycling, walking, and transit are viable options regularly used by all Sunnyvale residents and employees.												
CTO-1	Bicycle, Pedestrian, and Transportation Design Elements.	Very High	Minimal	Minimal	Minimal	Community Development	New & Existing Development	Voluntary	Improves Mobility	--	--	Miles of bike lanes and sidewalks installed
CTO-2	Bicycle, Pedestrian, and Transportation Travel Operations.	Very High	Low	Low	Low	Community Services	New & Existing Development	Voluntary	Improves Mobility	--	--	Number of bicycle support facilities
CTO-3	Transit.	Unknown	Unknown	Unknown	Unknown	Community Development	New & Existing Development	Mandatory	Improves Mobility	--	--	VTA transit ridership in Sunnyvale
CTO-4	Commute Programs.	Low-Mid	Minimal	Minimal	Minimal	Community Development	New & Existing Development	Mandatory for New, Voluntary for Existing	Provides Community Savings	--	--	Participation in commute trip reduction programs
CTO-5	School Commutes.	Low	Minimal	Minimal	Minimal	Community Development	Other	Voluntary	Improves Public Health	Provides Educational Opportunities	Improves Mobility	Commute to school mode share
<b>Optimize Vehicular Travel (OVT)</b> Minimize the environmental impact of vehicular travel												
OVT-1	Clean Alternative Motor Vehicles and Fuels.	High	Minimal	Minimal	Minimal	Community Development	New & Existing Development	Voluntary	Improves Public Health	--	--	Number of NEVs in operation and number of parking spaces designated for EV or clean fuel vehicles
OVT-2	Car Sharing.	Unknown	Unknown	Unknown	Unknown	City Manager	New & Existing Development	Voluntary	Improves Mobility	--	--	Number of car share operations or vehicles
OVT-3	Traffic Calming and Idling	High	Minimal	Minimal	Minimal	Community Development	New & Existing Development	Mandatory	Improves Mobility	Improves Public Health	--	Reduction in vehicle idling times.

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<b>Adaptation (A)</b> Plan and prepare the City of Sunnyvale for the potential impacts of climate change.												
A-1	Regional Coordination	Minimal	Minimal	Minimal	Minimal	City Manager	Other	Voluntary	Provides Educational Opportunities	--	--	Staff reports to Council every year on adaptation efforts
A-2	Preparedness	Low	Unknown	Unknown	Unknown	Community Services	Other	Voluntary	Provides Educational Opportunities	--	--	One training session every two years
A-3	Adaptive Planning	Unknown	Unknown	Unknown	Unknown	Community Development	New Development	Voluntary	Provides Educational Opportunities	--	--	N/A
A-4	Monitoring	Low	Unknown	Unknown	Unknown	Community Development	Municipal	Voluntary	Provides Educational Opportunities	--	--	N/A