



CUPERTINO

CITY OF CUPERTINO CLIMATE ACTION PLAN

APPENDIX D – Climate Action Planning Best Management Practices



As described in the CAP, reduction strategies were developed as part of a regional effort among other Santa Clara County participating jurisdictions. The strategy development process began with a review of best management practices (BMP) in emissions reductions from other jurisdictions within California and around the world. These BMPs were then compared against existing or planned City actions, policies, and programs to identify opportunities for expansion of existing City actions as well as opportunities for new action.

The following table shows the BMP list used to initiate the strategy development process. The table is organized into community-wide and municipal operations strategy areas (e.g., Energy, Transportation), and then further into sub-strategy areas. The BMPs are presented in the left hand column as “Measures”. The next four columns indicate if a particular BMP was determined to be “Existing” within the City, “Planned” for future implementation, or an opportunity to “Expand” existing City actions or develop “New” actions. The right hand column then presents notes describing the City’s existing and planned BMPs. Those BMPs for which none of the four columns are marked indicate strategies that have not yet been implemented within the City and were not considered priority opportunities at this time.

Some of the BMP strategies or sub-strategies do not apply to the Cupertino context (e.g., Airport Ground Operations), but are included in the table because this work was prepared as part of the previously-mentioned regional framework and was designed to be broadly applicable to a variety of jurisdictions within Santa Clara County.

This table provides a snapshot of the initial strategy development process, and represents the first filter of potential opportunities for the City’s CAP. Additional meetings with City staff and community engagement sessions resulted in the refined list of final opportunities presented in Chapters 3 and 4 of the CAP.

MEASURE	EXISTING	PLANNED	EXPAND	NEW	NOTES / RATIONALE
COMMUNITY-WIDE BEST MANAGEMENT PRACTICES					
ENERGY					
E-1 Consumer Behavioral Economics Program					
A	Comparative Use Billing	X			Existing: Through PG&E online billing statements.
B	Sub-Metering Requirements for MFR and Commercial Units			X	
E-2 Retrofit Financing					
A	Property Assessed Clean Energy (PACE)		X		Planned: Council in support of City joining SCC program development.
B	On-Bill Financing (PG&E)	X			Existing: Through PG&E; significant marketing /outreach through PG&E and Green Biz.
C	Revolving Loan Fund for Energy Efficiency Improvements				
D	Retrofit Rebate Programs	X			Existing: Through PG&E; significant marketing /outreach through PG&E and Green Biz.
E	Weatherization Assistance Programs	X			Existing: Through Energy Upgrade SV, Green@Home, and Rebuilding Together Silicon Valley.
F	Energy Service Company (ESCO) Promotion / Energy Performance Contracting			X	
E-3 Retrofit Promotion					
A	Energy Efficiency Audit Programs	X			Existing: Through Energy Upgrade SV, Green@Home, Rebuilding Together SV, and GreenBiz.
B	Retrofit Outreach Campaign	X			Existing: Through Energy Upgrade SV, Green@Home, Rebuilding Together SV, and GreenBiz.
E-4 Retrofit Related Regulations					
A	Residential Energy Conservation Ordinance (RECO) (Point of Sale)				
B	Commercial Energy Conservation Ordinance (CECO) (Point of Sale or Point of Lease)				
C	Point-of-Sale Home Energy Rating / Energy Performance Certificates (SFR)			X	
D	Point-of-Sale Benchmarking and Reporting / Energy Performance Certificates (COM and MFR)				
E	Annual Benchmarking and Disclosure			X	
F	Mandatory Retro-Commissioning (Annual or Biannual)			X	

MEASURE	EXISTING	PLANNED	EXPAND	NEW	NOTES / RATIONALE
E-5 Lighting Efficiency					
A	Building Owner/Tenant Lighting Efficiency Outreach Campaign	X			Existing: Green Biz strong focus on lighting efficiency.
B	Mandatory Non-Residential Lighting Upgrades (Point-of-Sale or Tenant Improvement)				
C	Parking Lot Light Retrofit Ordinance			X	
E-6 Energy Efficient Appliances					
A	Appliance Efficiency Outreach Campaign	X			Existing: Through Energy Upgrade SV, Green@Home, Rebuilding Together SV, and GreenBiz.
B	Mandatory ENERGY STAR (Major Appliances)			X	
E-7 Energy Efficient New Construction					
A	Energy Efficiency Performance Standard Above Code	X			Existing: City adopted a Green Building Ordinance.
B	Energy Efficiency Rating System for New Buildings	X			Existing: City has Green Building Ordinance.
C	Reduced Permitting Fees for Energy Efficient Construction		X		Planned: General Plan policy to offer reduced permit fees for projects that exceed Title 24 as an energy efficiency incentive.
D	Individual Unit Temperature Controls in MFR Buildings			X	
E	Mandatory Commissioning in New Buildings			X	
E-8 Smart Grid Integration					
A	Building Owner/Tenant Smart Grid Outreach Campaign (Energy Management Systems)			X	
E-9 Building Shade Trees					
A	Building Shade Tree Outreach Campaign	X			Existing: City has deep urban street trees program that includes shade trees - goal to plant 1600 trees in 3 years. Also certified as a Tree City USA. City offers free shade trees to residents that complete an energy audit or businesses that complete GreenBiz.
B	Shade Tree Requirement for New Construction			X	

MEASURE	EXISTING	PLANNED	EXPAND	NEW	NOTES / RATIONALE
E-10 Communitywide Solar Photovoltaic Development					
A	Streamlined (or Eliminated) Distributed Solar Permitting	X			Existing: City's permit process is simple and very efficient; fees are listed online and permit will be online in June.
B	Renewable Energy Outreach Campaigns (PV, Solar Hot Water, Ground-Source Heat Pumps)	X			Existing: Through Energy Upgrade SV, Green@Home, Rebuilding Together SV, and GreenBiz.
C	Solar Service Provider PPA Promotion			X	
D	Community Shared Solar Promotion			X	
E	Solar Empowerment Zones			X	
E-11 Other Communitywide Renewable Energy Development					
A	Heat Pump Assistance / Coordination	X			Existing: Through Energy Upgrade, Rebuilding Together SV and GreenBiz.
B	Public Right-of-Way Ground Source Heat Pump Fields (Urban Density Areas)			X	
E-12 Community Choice Aggregation					
A	Community Choice Aggregation Feasibility Study			X	
TRANSPORTATION					
T-1 Pedestrian Environment Enhancements					
A	Traffic Calming	X			Existing: City has installed traffic calming projects.
B	Pedestrian Master Plan	X		X	Existing: City adopted a Pedestrian Transportation Plan in 2002. Expand: Existing Pedestrian Transportation Plan is over 10 years old; should be updated to reflect existing conditions, community priorities, and new improvement opportunity areas.
C	Complete Streets	X			Existing: City has requirements for sidewalk construction with redevelopments; some areas include aesthetic pavers and landscape strips.
T-2 Bicycle Infrastructure Expansion (Paths, Lanes, Routes)					
A	Planned Bicycle Infrastructure Expansions	X			Existing: Designated Bicycle Friendly Community (Silver); Bicycle Master Plan defines routes, paths, bike lanes to be implemented over time.
B	Bicycle Master Plan	X			Existing: City adopted a Bicycle Transportation Plan in 2011.

MEASURE	EXISTING	PLANNED	EXPAND	NEW	NOTES / RATIONALE
T-3 Bicyclist Accommodations					
A	Bike Parking	X			Existing: Require commercial offices to designate certain percentage of parking for bicycles.
B	Bike Commute Facility Requirements for New Construction	X			Existing: Part of Green Building Ordinance.
C	Bike Access to Transit	X			Existing: Bicycle connectivity to transit through streets, which all have bike lanes.
D	Bikes on Transit	X			Existing: VTA Program
T-4 Bicycle Outreach Program					
A	Bike Safety Education Program	X			Existing: Through Public Safety Commission Boltage Agreement.
B	Local Bike Routes Map / Signage	X			Existing: City prepared Cupertino Bikeways Map.
C	Bicycle Advisory Committee and/or Bike Program Manager	X			Existing: City has a Bicycle Pedestrian Commission and City's bike fleet. Traffic Engineer manages all other bike/ped projects. Designated Bicycle Friendly Community.
T-5 Bikeshare					
A	Bikeshare Program	X	X		Existing: City bike fleet for employees; encourage large employers in offering bikes to employees (fairly successful). Planned: Would expand to Community-wide if funding was available.
T-6 Transportation Demand Management					
A	Transportation Demand Management Program			X	
B	Transit Fare Subsidies				
C	Parking Cash Out			X	
D	Carpool / Rideshare Program			X	Existing: State law with implementation supported by BAAQMD. City is developing for municipal employees.
E	Telecommuting / Flexible Hours	X			Existing: Offers 9/80 schedule.
F	Guaranteed Ride Home			X	
G	Park and Ride Facilities	X			Existing: VTA facilities.
H	Safe Routes to School / School Rideshare Programs	X	X		Existing/Planned: Cupertino School District has received funds in past and continues to apply.
T-7 Transit Route Expansion					
A	Community Bus / Shuttle			X	

MEASURE	EXISTING	PLANNED	EXPAND	NEW	NOTES / RATIONALE	
T-8 Transit Priority						
A	Transit Signal Priority		X	X		Planned: Currently in development along Stevens Creek Blvd Expand: Increases speed and convenience of bus transit on congested corridors. Expand to all buses on such corridors.
B	Transit Intersection Queue Jumpers			X		Expand: Increases speed and convenience of bus transit on congested corridors. Expand to such corridors.
T-9 Transit Ridership Facilitation						
A	Transit Stop Amenities	X	X			Existing/Planned: Considering requirement for developers to install bus shelters and walking/transit amenities.
T-10 ITS Strategies						
A	Traffic Signal Coordination	X	X			Existing: StreetWise used city-wide; will be expanded in the future. Planned: Member of the SV ITS Group for future shared traffic data and cross-jurisdictional traffic signal coordination.
T-11 Transit-Oriented Development						
A	Transit-Oriented Development Land Use and Zoning Designations				X	
B	Transit-Oriented Development Design Guidelines				X	
C	High Speed Rail Station Planning					
T-12 Mixed-Use Development						
A	Mixed-Use Land Use and Zoning Designations	X	X			Existing/Planned: General Plan and Zoning supports mixed-use.
T-13 Alternative Fuel Vehicles						
A	Public Electric Charging Infrastructure	X		X		Existing: Stations at City Hall. Expand: Reduces participation barrier to electric vehicle ownership/use by reducing range anxiety.
B	Charging Infrastructure Permit Streamlining (Residential and Commercial)	X				Existing: Easy to get an EV permit; fees listed online, application will be available online by June.
C	Charging Pre-wiring Requirements for New Residential Construction (SFR and MFR)				X	
D	CNG Fueling Station Promotion/Pilot Program				X	

MEASURE	EXISTING	PLANNED	EXPAND	NEW	NOTES / RATIONALE
WATER					
W-1 Consumer / Behavior Pricing Programs					
A	Water Metering	X			Existing: Water meters required for all residential and commercial customers.
B	Tiered-Rate Pricing	X			Existing: Tiered-rate water pricing for residential and commercial customers.
C	Consumer Education Billing Program (e.g., comparative use indicators on water bills)			X	Expand: Done through GreenBiz, but with little support from water companies to access this data.
W-2 New Construction Water Efficiency Performance Program					
A	Mandatory Water Efficiency Performance Standard Above Code	X			Existing: Water Efficient Landscape Ordinance; Green Building Ordinance.
W-3 Existing Building Water Efficiency Program					
A	Indoor Water Efficiency Outreach Campaigns	X	X		Existing/Planned: Ongoing to support UWMP 2010 conservation programs; also through GreenBiz, Green@Home and Growing Greener Blocks.
B	Water Efficiency / Leakage Audit Programs	X	X		Existing/Planned: Ongoing to support UWMP 2010 conservation programs; also through GreenBiz, Green@Home and Growing Greener Blocks.
C	Water Conservation Ordinance (point-of-sale or tenant improvement)			X	
D	Rebate Programs	X	X		Existing/Planned: Promotes rebates offered through SCVWD
E	Efficiency Fixture Fitting Direct Install (Commercial and Residential)	X			Existing: Through GreenBiz, Green@Home, and Rebuilding Together SV.
W-4 New Landscapes Water Efficiency Performance Program					
A	Water Efficient Landscape Ordinance	X	X		Existing/Planned: Ordinance effective as of 2010.
B	Mandatory Irrigation System Efficiency Requirements	X	X		Existing/Planned: Through ordinance effective as of 2010.
C	Landscape Watering Limits			X	Existing: City enforces limits during drought periods (3 days/week); interested in expanding.
W-5 Existing Landscapes Water Efficiency Program					
A	Landscape Retrofit Outreach Campaigns	X			Existing: Through GreenBiz, Green@Home and Growing Greener Blocks programs.
B	Irrigation Efficiency Direct Install Program	X			Existing: Through GreenBiz, Green@Home and Growing Greener Blocks programs.
C	Lawn Conversion Cash Incentive Program	X			Existing: Through SCVWD.
D	Irrigation Efficiency Incentives	X			Existing: Through SCVWD.
E	Landscape Watering Limits (time of day, days per week)	X			Existing: Through ordinance effective as of 2010.
F	Water Efficient Landscape and Irrigation System Ordinance for Large Retrofits	X			Existing: Through ordinance effective as of 2010.
G	Rainwater Collection Barrel Subsidy		X		Existing/Planned: Through Green@Home and Growing Greener Blocks programs.
H	Graywater Development Guidelines and Technical Support			X	

MEASURE	EXISTING	PLANNED	EXPAND	NEW	NOTES / RATIONALE
W-6 Recycled Water Irrigation Program					
A	Recycled Water Infrastructure Development Program			X	
B	Recycled Water Infrastructure Requirements for New Construction			X	
C	Recycled Water Use Ordinance			X	
SOLID WASTE					
SW-1 Zero Waste Goal					
A	Zero Waste Plan		X		Expand: Part of Franchise agreement with Recology.
SW-2 Consumer / Behavior Pricing Programs					
A	Tiered-Rate Waste Collection Fee Program				
SW-3 Food Scrap and Compostable Paper Diversion					
A	Food Scrap and Compostable Paper Collection Program	X	X	X	Existing/Planned: accepted in Yard Waste Bins through Recology. Expand: Participation in existing food scrap diversion program should be maximized (Morgan Hill has a successful model); perform residential waste audits to determine current participation rates and develop outreach program to improve upon audit findings.
B	Residential Food Scrap and Compostable Paper Diversion Ordinance	X			Existing: City has ordinance.
C	Commercial Food Scrap and Compostable Paper Diversion Ordinance	X			Existing: City has ordinance.
D	Outreach Campaign to Encourage Food Scrap and Compostable Paper Diversion	X	X		Existing/Planned: Promoted through Cupertino Scene, Recology Newsletter and Event Tabling.
E	Outreach Campaign to Encourage Home / Business On-Site Composting	X	X		Existing/Planned: Promoted through GreenBiz program.
SW-4 Yard Waste Diversion					
A	Yard Waste Diversion Outreach Campaign	X	X		Existing/Planned: Promoted through Cupertino Scene, Recology Newsletter and Event Tabling.
B	Residential Yard Waste Diversion Ordinance				
C	Commercial Yard Waste Diversion Ordinance				
SW-5 Construction & Demolition Waste Diversion Program					
A	Outreach Campaign to Building Industry	X	X		Existing/Planned: Promoted through Recology.
B	Construction & Demolition Waste Diversion Ordinance (with specific lumber diversion requirements)			X	Existing: C&D policy in place; City would like to expand on lumber diversion requirements.

MEASURE	EXISTING	PLANNED	EXPAND	NEW	NOTES / RATIONALE	
SW-6 Recycling Program						
A	Curbside Recycling Collection Program	X	X			Existing/Planned: Included in cost of garbage removal.
B	Local Recycling Collection Centers	X	X			Existing/Planned: Quarterly Environmental Recycling Day; Apple Computer Electronics Recycling Centers, Bottle Collection/Redemption Centers, Donation Agencies, Reuse-A-Shoe Drop Off Locations, Cartridge World, etc.
A	Comingled Waste Collection Program ("one bin" concept)	X	X			Existing/Planned: Recyclables are comingled.
B	Recycling Outreach Campaigns	X	X			Existing/Planned: Promoted through Cupertino Scene, Recology Newsletter and Event Tabling.
C	Residential Recycling Ordinance			X		Expand: Service offered but not mandated.
D	Commercial Recycling Ordinance			X		Expand: Service offered but not mandated.
E	Multi-family Recycling Ordinance			X		Expand: Service offered but not mandated.
F	Free-Cycle and Re-Use Networks					
SW-7 Source Reduction Program						
A	Voluntary Waste Reduction Audits for Large Waste Generators	X	X			Existing/Planned: Through GreenBiz program.
B	Reusable Shopping Bag Ordinance	X				Existing: Adopted with implemented scheduled for October.
C	Compostable Carry-Out Container and Disposable Utensil Ordinance		X			Planned: Moving forward with EIR.
SW-8 Waste Hauling Emissions Reduction Program						
A	Low-Emission Waste and Recycling Trucks	X				Existing: Much of Recology's fleet runs on biodiesel, liquefied natural gas, and compressed natural gas.
B	Waste Hauling Route Optimization	X	X			Existing: Recology uses fully-automated trucks to increase route efficiency.
SW-9 Landfill Methane Capture						
A	Methane Capture System	X				Existing: ClimateSmart™ Program Recology captures and destroys methane at its California landfills; Some captured gas is sold to PG&E.

MEASURE	EXISTING	PLANNED	EXPAND	NEW	NOTES / RATIONALE	
GREEN INFRASTRUCTURE						
G-1 Urban Forest Program						
A	Urban Forest Master Plan	X	X			Existing/Planned: tree specifications included in Heart of the City Master Plan; conceptual plans have streetscape design concepts.
B	Tree Planting Campaign	X	X			Existing/Planned: City is designated Tree City USA.
C	Tree Planting Incentives	X	X			Existing/Planned: City Tree4Free Program.
D	Mandatory Tree Planting Requirements for New Development	X	X	X		Existing/Planned: Street Tree Ordinance (14.12) requires tree in front yard for all new 2-story homes. Expand: Shade tree benefits are maximized through proper tree selection, siting, and planting/maintenance; include additional detail in Street Tree Ordinance to help developers/landscapers choose and site shade trees.
G-2 Habitat Restoration Program						
A	Landowner Outreach Campaign	X	X			Existing/Planned: Promoted through various programs.

MEASURE	EXISTING	PLANNED	EXPAND	NEW	NOTES / RATIONALE
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MUNICIPAL OPERATIONS BEST MANAGEMENT PRACTICES

FACILITIES

F-1 Low-Carbon Grid Electricity

A	Utility-Enhanced Clean Generation Portfolio				
B	Community Choice Aggregation			X	
C	Utility-Scale Renewable or Low-Carbon Electricity Generation			X	

F-2 Site-Scale Renewable or Low-Carbon Electricity Generation

A	Energy Bonds (CREBS and QECBS)				
B	Solar PV Installations on City / County Buildings, Parking Lots, Land	X	X		Planned: Part of the Alameda County PPA Expand: City should continue to seek opportunities for solar installations. Site scale PV systems can be installed by a City or solar service provider and assist emissions reduction goals.
C	Solar Thermal Installations on City / County Facilities	X			Planned: Being considered at Blackberry Farm Pool via SVEW partnership.
D	Ground Source Heat Pump			X	
E	Fuel-Cell Installations			X	
F	Biogas Capture / Combustion				Managed by Recology (waste) and San Jose (WWTP).

F-3 Existing Building Energy Retrofit

A	Energy Efficiency Fund			X	
B	Building Retrofit Standard (e.g., LEED Silver)	X	X		Planned: Per city's Green Building Standards Code amendments (Ordinance No. 12-2099): LEED or LEED EBOM certification required for nonresidential additions or renovations over 35,000 sf Expand: City could consider defining desired outcome from LEED certification to help guide building design projects (e.g., focus on energy conservation or water conservation credits)
C	Building Energy Benchmarking			X	
D	Municipal Building Energy Retrofit Targets / Policy (e.g., Reduce Energy Use by XX%)			X	

MEASURE	EXISTING	PLANNED	EXPAND	NEW	NOTES / RATIONALE
E Building Energy Audits	X				Existing: Major facilities have been evaluated through an ESCO energy audit.
F Building Energy Audit Targets / Policy (e.g., # of Audits/yr, Audits Required Every 5 yrs.)	X	X	X		Existing / Planned / Expand: Program underway as part of Silicon Valley Energy Watch and Right Lights Plus
G Energy Service Companies (ESCO)	X			X	Existing: Major facilities have been evaluated through an ESCO energy audit.
H Indoor Lighting Retrofits (e.g., Ballast Lighting, Exit Signs)	X				Existing: City completed indoor lighting retrofits for all buildings.
I Exterior Building Lighting Retrofits (e.g., Security Lighting)	X				Existing: City completed exterior lighting retrofits for all buildings.
J Parking Garage Lighting Retrofits					Not applicable
K Advanced Lighting Controls / Monitoring Systems (e.g., Automatic Dimmers)				X	
L Building Envelope Retrofits				X	
M Building Systems Retrofits (e.g., HVAC, MEP)	X	X	X		Existing / Planned / Expand: Ongoing following ESCO audit; also part of investment-grade audits.
N Cool Roof Retrofits				X	
O Green Roofs				X	
P Low-Flow Fixtures at Public Facilities (e.g., Pool Showers)	X				Existing: City completed low-flow fixture retrofits for all public facilities.
Q Low-Flow Toilets	X				Existing: City completed low-flow toilet retrofits for all buildings/facilities.
F-4 New Building Energy Performance					
A Green Building Standard (with Specific Energy Performance Requirement)		X	X		Planned: Per city's Green Building Standards Code amendments (Ordinance No. 12-2099): LEED certification required for new nonresidential construction of 25,000-50,000 sf; LEED Silver required for new nonresidential construction greater than 50,000 sf; Expand: City interested in possibly expanding scope of Green Building Standards Code; could consider defining desired outcome from LEED certification to help guide building design projects (e.g., focus on energy conservation or water conservation credits).
B Passive Energy Design (e.g., Solar Orientation)				X	
C Solar-Ready Construction				X	

MEASURE	EXISTING	PLANNED	EXPAND	NEW	NOTES / RATIONALE	
F-5 Behavior / Conservation / Energy Management						
A	Energy Efficient Procurement Policy (e.g., Requires Energy Star Appliances)	X		X		Existing: Part of the Environmental Preferable Purchasing Policy, 2007. Expand: Policy update scheduled for 2013.
B	Energy Management Systems - Office Equipment (e.g., Monitors, Printers)	X		X		Existing: Part of the Environmental Preferable Purchasing Policy, 2007. Expand: Policy update scheduled for 2013.
C	Consumption Data Collected per Facility (e.g., per park unit, not per meter in each park)	X		X		Existing: City uses the ENERGY STAR Portfolio Manager 2012. Expand: City will switch to using HARA in 2013.
D	Commissioning and Retro-Commissioning Program				X	
E	Interdepartmental Conservation Competitions				X	
F	Employee Information / Education	X		X		Existing: On-going email distribution, social media marketing, and written articles. Expand: Based on new measures / actions, identify ways to expand information distribution.
F-6 Public Realm Lighting Efficiency						
A	Traffic Signal Efficiency Retrofits	X				Existing: Completed in 2005.
B	Street Light Efficiency Retrofits	X				Existing: Completed in 2011.
C	Solar Street Light Retrofits					
D	Parking Lot Lighting Retrofits	X	X			Existing / Planned: On-going as of 2009.
E	Park Facility Lighting Retrofits	X	X			Existing / Planned: On-going as of 2009.
F	Public Realm Lighting Efficiency Standards				X	
F-7 District Heating						
A	District Energy System					
B	District Energy Feasibility Study Program					
C	District Energy Infrastructure Development Program					
F-8 Water System Energy Efficiency						
A	Variable Frequency Drives at Pumping Stations					
B	Water Treatment Plant Process Energy Optimization					

MEASURE	EXISTING	PLANNED	EXPAND	NEW	NOTES / RATIONALE	
F-9 Landscape Water Conservation						
A	Water Conservation Plan for Public Parks		X	X		<p>Planned: The City does not have a formal plan, but staff is trained to use watering schedules and water efficient irrigation equipment.</p> <p>Expand: City interested in best practices examples on this. Mountain View has an adopted Water Conservation Plan for City Properties and landscape water budgets for park units.</p>
B	Climate Sensitive and Water Efficient Irrigation Technology	X		X		<p>Existing: Installed 111 hydro point evapotranspirative controllers in 2011.</p> <p>Expand: City will follow State's Model Water Efficient Landscape Ordinance.</p>
C	Advanced Irrigation Training for Parks Staff	X				Existing: Training related to hydro point installation.
D	Recycled Water Use		X			Planned: Recycled water from San Jose scheduled to reach large commercial customers beginning 2013, and expand thereafter.
E	Green Grounds Policy (e.g., Watering Schedules, Plant Selection)				X	
F-10 Airport Energy Efficiency Retrofits						
A	Green Building Construction / Retrofit Standard					
B	Lighting Fixture Retrofit					
VEHICLE FLEET						
V-1 Efficient Vehicles						
A	Vehicle Fleet Plan (e.g., Transition to Fuel Efficient Vehicles)				X	
B	Fuel-Efficient Vehicle Procurement Policy				X	
C	Fuel-Efficient Operational and Maintenance Policies	X			X	Existing: City has maintenance policies in place.
D	Anti-Idling Policy	X		X		<p>Existing: City has anti-idling policy in place.</p> <p>Expand: City would like to identify ways to strengthen existing policy.</p>

MEASURE	EXISTING	PLANNED	EXPAND	NEW	NOTES / RATIONALE
V-2 Alternative Fuel Vehicles					
A	Zero Emissions Municipal Fleet Target			X	
B	Vehicle Fleet Plan (e.g., Transition to Alternative Fuel Vehicles)			X	
C	Alternative Fuel Vehicle Procurement Policy			X	
D	Bio-Fuel Production				
E	CNG Fueling Stations			X	
F	Electric Vehicle Charging Stations	X	X		Existing / Planned: No notes provided
G	Fuel Cell Fueling Station				
V-3 Behavior / Fuel Conservation					
A	Fuel-Efficient Driver Training			X	
B	Route Optimization	X		X	Existing: Used for Building Department inspections via neighborhood-based planning (using GIS mapping, or employee knowledge of locations). Expand: Could be expanded to other city departments.
C	Telematics			X	
D	Municipal Bike Fleet				
E	Car Share Program				
F	Fuel Saving Recognition Program for Employees / Departments			X	
G	Fleet Reduction Program (e.g., Vehicle Sharing, Bicycle Police Patrols)			X	
V-4 Airport Ground Operations					
A	Airport Ground Operations Vehicle Fuel Conversion				
V-5 Airplane Taxi Efficiency Improvements					
A	Surface Airplane Congestion Reduction Program				
B	Assisted Airplane Towing				
C	Equipment Fuel Conversion				

MEASURE	EXISTING	PLANNED	EXPAND	NEW	NOTES / RATIONALE
POWER GENERATION FACILITIES					
P-1 Generation Efficiency Improvements					
A	Turbine Efficiency Improvements				
P-2 Combined Heat & Power					
A	Co-Generation System				
P-3 Alternative Fuels					
A	Biomass				
SOLID WASTE FACILITIES					
S-1 Waste Reduction					
A	Green Procurement Specifications	X		X	Existing: City has an Environmental Preferable Purchasing Policy. Expand: EPP Policy is being updated in 2013.
B	Zero-Waste Strategy		X		Planned: City Council's 2008/2009 Work Plan prioritized creation of Zero Waste Policy.
C	Waste Reduction and Diversion Goals (e.g., All City Operations or per Department)			X	
D	Diversion Rate Tracking at Municipal Facilities			X	
E	Hand-Sorted Waste Containers				
F	Waste Audits and Surveys			X	
S-2 Food Scrap and Compostable Paper Diversion					
A	Municipal Collection and Composting Program	X		X	Existing: City has a food waste composting program. Expand: May be opportunities for expanded collection (e.g., locations, items collected).
B	Composting at Airport Terminals				
S-3 Recyclable Paper Diversion					
A	Paperless Office Policy / Program	X		X	Existing: City has paperless office policy / program. Expand: City interested in opportunities to expand policy / program.
S-4 Landscape Waste Diversion					
A	On-Site Landscape Waste Reduction Program	X			Existing: No notes provided
B	Municipal Landscape Waste Composting Program	X			Existing: No notes provided
C	Waste Management Training for Park Department Staff / Groundskeepers	X			Existing: No notes provided

MEASURE	EXISTING	PLANNED	EXPAND	NEW	NOTES / RATIONALE	
S-5 Construction and Demolition Waste Diversion						
A	C+D Diversion Policy for Municipal Projects (e.g., 75% Lumber Diversion)	X		X		Existing: No notes provided Expand: Could expand diversion requirements for municipal projects to specifically increase lumber diversion requirements.
S-6 Methane Capture and Combustion						
A	Landfill Biogas Capture and Flare System					
S-7 Waste-To-Energy						
A	Landfill Biogas-to-Energy Facility					
B	Food Waste-Bio digester Energy Facility					
C	Waste-to-Energy Gasification Facility					
D	Anaerobic Digestion at Wastewater Treatment Plant					
WASTEWATER TREATMENT FACILITIES (NON ENERGY-RELATED EMISSIONS)						
W-1 Methane Capture and Combustion						
A	Methane Capture and Generation System					
W-2 Nitrous Oxide Emission Reduction						
A	Improved Plant Design					
B	Improved Operations					



CUPERTINO

CITY OF CUPERTINO CLIMATE ACTION PLAN

APPENDIX E – Water Conservation and Energy Efficiency Toolkit

