

FINAL DRAFT

City of Santa Cruz

Final Draft Appendix of Action

December 2011

1000 Steps (or 256 Actions) To Meet Our Goal

This CAP Appendix of Actions provides a list of actions that improve ways the City and community uses and generates energy, focuses on the adoption of sustainable practices, and invests in a future that is 80% less carbon-intense. These actions are considered feasible and many have been tested and proven elsewhere as effective tools for the job.

Note: Table columns listing timeframe for implementation (example timeframe provided for several actions), key City contacts, potential partners, costs, and GHG reduction potential have been estimated using local and State data. Actions written in *italics* are new or significantly modified based on public comments and recommendations.

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Goal	Measures	Actions	Time Frame for Implementation	Primary Department(s)	GHG Reduction Potential (MT of CO2e)
Chapter 4. ENERGY USE IN THE BUILT ENVIRONMENT					
Goal: Significantly reduce energy use in municipal, residential and commercial buildings.					
MUNICIPAL SECTOR					
	1. Formalize a Santa Cruz Municipal Energy Management Office to coordinate energy use practices, efficiency upgrades, and future investments in renewable energy among departments and services.	a. Hire and support a staff person to evaluate additional energy saving opportunities in City buildings. Provide training in energy efficiency and green building methods.	Short	Fleet & Facilities Operations	in M2
		b. Seek funding to continue Energy Office staffing.	Short	Fleet & Facilities Operations	
		c. Establish individual building and facility goals for energy use reductions with incentives for meeting those goals. Report back to departments periodically on goal attainment.	Short	Energy Management Office	
		d. Designate an Energy Management Office liaison for each City functional use.	Short	Energy Management Office	
		e. Evaluate opportunities to leverage municipal energy cost savings towards additional investments in energy system upgrades.	Medium	Energy Management Office	
		f. Continue to improve energy use tracking and reporting procedures.	Medium	Energy Management Office	
		g. Optimize municipal energy use and address deferred maintenance.	Long	Fleet & Facilities Operations	
	2. Implement the Energy Efficiency Conservation Strategy (EECS) to reduce energy use in municipal buildings by an additional 40% by 2020.	a. Complete EECS to guide future energy efficiency and management strategies.	Complete	Energy Management Office	553
		b. Meet annually with City departments to create the next year's EECS implementation priorities.	Short	Energy Management Office	
		c. Coordinate EECS activities among departments to identify funding mechanisms and to research and identify new energy efficiency opportunities, products, and technologies for municipal infrastructure and City services.	Medium	Energy Management Office	
		d. Design and implement energy load management and demand response systems for City departments and report annually on EECS results.	Medium	Energy Management Office	
		e. Meet most recent energy efficiency requirements when remodeling or building new municipal buildings.	Medium	Fleet & Facilities Operations	
		f. Establish a minimum level of energy efficiency required for new and extensively remodeled municipal buildings.	Medium	Fleet & Facilities Operations	
	3. Integrate new energy efficient equipment and reduction measures into the EECS for the wastewater treatment and collection system to reduce energy use 10% below 2005 values.	a. Complete a Wastewater Treatment Facility audit and energy efficiency plan to reduce energy use and emissions.	Medium	Public Works	416
		b. Evaluate options for the most cost effective and efficient use of methane generated at the facility (e.g. high efficiency co-generation and fuel cell technology).	Short	Public Works	
		c. Evaluate cost effective options to convert City services to low carbon alternatives.	Medium	Public Works	
	4. Integrate new energy efficient equipment and reduction measures into the EECS for the Water Department to reduce energy use 10% below 2005 values.	a. Identify and implement additional energy efficiency upgrades for pumps, equipment, and other measures.	Medium	Water Department	148
	5. Integrate new energy efficient equipment and reduction measures into the EECS for the Information Technology Division to reduce energy use 10% below 2005 values.	a. Install computer server virtualization technology and desktop virtualization.	Medium	IT	40
RESIDENTIAL SECTOR					
	1. Increase market penetration of the Green Building Program to 10% of residential buildings by 2020.	a. Provide support and incentives to increase the percentage of Green Building award winners to 20% of GBP applicants.	Long	Green Building	1,017

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		<i>b. Establish a Green Building Award option for residents who participate in programs such as AMBAG Energy Watch and Home Energy Rating System audits that achieve a 30% reduction in energy and/or water use within their current residences.</i>	Medium	Green Building	
		<i>c. Integrate solar finance district development and implementation with Green Building Program.</i>	Medium	Green Building, Climate Action	
		<i>d. Compile guidance materials regarding new building techniques and materials that enhance conservation, high efficiency and zero waste.</i>	Medium	Green Building	
		<i>e. Develop an information packet on the value of energy efficiency upgrades to homes and apartments at time of sale or lease. Provide information packet to local realtors.</i>	Short	Green Building	
		<i>f. Support development and distribution of an energy use report card for homes.</i>	Long	Green Building	
		<i>g. Continue to revise Green Building Program to incorporate new technologies and best management practices.</i>	Ongoing	Green Building	
		<i>h. Develop energy usage reporting methods and tools for renters and home owners.</i>	Medium	Green Building, Climate Action	
		<i>i. Integrate City Tree Programs with Green Building Program to include guidance on tree species that enhance climate-responsive performance of buildings.</i>	Short	Green Building, Parks and Rec	
		<i>j. Work with Ecology Action to add information to the existing Green Building kiosks on the value of Home Performance .</i>	Short	Green Building	
	2. Partner with others to create tools and incentives for landlords to invest in home weatherizing and energy efficiency upgrades for off campus student housing to obtain 50% penetration of the 52% of UC Santa Cruz students who live off campus by 2020.	<i>a. Create or expand current programs that provide energy efficiency audits and retrofits for off campus student and other rental housing. (AMBAG, Central Coast Energy Services, Ecology Action, UCSC Student Services)</i>	Medium	Climate Action	396
		<i>b. Investigate grant and other funding to provide energy retrofit incentives to student off campus housing.</i>	Long	Climate Action	
		<i>c. Integrate the Climate Action Teams Program with current Education for Sustainable Living; providing tools and opportunities for students to create their own climate action plans while in school and going forward.</i>	Medium	Climate Action	
		<i>d. Support UC Student Services efforts to create a “green” off campus rating system.</i>	Long	Climate Action	
		<i>e. Work with UC Sustainability office to create programs to invest in solar electric and hot water systems for rental properties.</i>	Medium	Climate Action	
	3. Expand participation in energy efficiency upgrade programs to 25% of all homes within the City by 2020.	<i>a. Partner with Energy Upgrade California to increase participation by City residents.</i>	Short	Green Building	848
		<i>b. Increase penetration of energy efficiency retrofit programs (Central Coast Energy Services) for low income housing within the City to 75% by 2020.</i>	Short	Green Building, Water Department	
		<i>c. Provide access to and knowledge of tools to improve energy efficiency of residential buildings through education, media, neighborhood outreach, web portals, and special events.</i>	Short	Green Building	
		<i>d. Support programs and subsidies for residential home energy retrofits through the Green Building Program.</i>	Long	Green Building	
		<i>e. Create or expand energy efficiency programs to reach income brackets of the residential community not already served.</i>	Short	Green Building	
COMMERCIAL SECTOR					
	1. Increase participation in the Monterey Bay Area Green Business Certification Program by 250 additional businesses within the City by 2020.	<i>a. Provide ongoing support for the implementation of the climate change mitigation section in the program.</i>	Short	Green Business	3,750
		<i>b. Incorporate the Green Business Program into a green downtown campaign (i.e. Green Wave) to encourage participation of businesses and property owners in efficiency programs.</i>	Medium	Economic Development and Redevelopment Agency	
		<i>c. Work with key members of the Hotel and Property Management commercial sectors to investigate other innovative programs.</i>	Short	Green Business	

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2. Increase market penetration of the Green Building and LEED Programs to 10% of the commercial and industrial space by 2020.	a. Increase Green Building award winners to 20% of commercial program applicants.	Long	Green Building	1,200
	b. Initiate commercial interiors and tenant improvement into Green Building Program.	Medium	Green Building	
	c. Compile and make available technical guidance and building design tools for energy efficient retail/workspace.	Medium	Green Building	
	d. Continue to provide forums for local professionals in green building and retrofit programs.	Medium	Green Building	
	e. Integrate Solar Finance District development and implementation with Green Building Program.	Medium	Green Building, Climate Action	
	f. Continue to revise Green Building Program to incorporate new technologies and best management practices.	Long	Green Building	
3. Increase the amount of energy efficient commercial space within the City to 30% by 2020.	a. Increase awareness and coordinate use of incentives for commercial landlords to invest in energy efficiency upgrades.	Short	Green Business, Green Building	3,596
	b. Coordinate communication and quantification among existing audit/retrofit programs to move toward a turn-key energy efficiency service including technical assistance and incentives.	Medium	Green Building	
	c. Establish a green downtown campaign (i.e. Green Wave) to encourage wide scale participation of businesses and property owners in efficiency programs.	Medium	Green Business, Green Building	
	d. Establish an Energy Award for businesses that voluntarily reduce energy use (i.e. RightLights and Green Business Programs) by 30%.	Medium	Green Business, Green Building	
	e. Establish specific guidance for comprehensive energy audits and upgrades for commercial buildings.	Short	Green Building	
	f. Explore specific funding mechanisms to support commercial building energy retrofit programs.	Short	Green Building	
	g. Investigate feasibility of establishing central cogeneration facilities in high density commercial and industrial areas.	Long	Green Business, Green Building	

Chapter 5. SUSTAINABLE TRANSPORTATION AND LAND USE PLANNING

A: Reduce GHG emissions by reducing vehicle miles traveled, decreasing single occupancy vehicle travel, and increasing the use of alternative fuels and transportation options.

B: Promote land use strategies that encourage density development along transit corridors and activity centers to support efficient, accessible, and sustainable transportation options.

C: Implement the City's General Plan including programs related to alternative transportation.

MUNICIPAL SECTOR				
1. Reduce City fleet vehicle emissions by 20% by 2020.	a. Calculate GHG emissions from fleet and set reduction goals for each City department or functional use. Quantify past program success where possible.	Short	Fleet & Facilities Operations, Energy Mgmt Office	516
	b. Designate fleet management liaisons within departments that make functional sense.	Short	Energy Management Office	
	c. Upgrade to more efficient pool vehicles. Implement programs to promote pool vehicle use.	Medium	Fleet & Facilities Operations	
	d. Implement energy efficient vehicle purchasing policy.	Short	Fleet & Facilities Operations, Finance	
	e. Implement fleet fuel efficiency monitoring program to routinely monitor vehicle performance.	Short	Fleet & Facilities Operations	
	f. Increase the % of biodiesel in fuel as equipment and state law permits.	Medium	Fleet & Facilities Operations	
	g. Prioritize the use of locally-sourced biodiesel when available and cost effective.	Medium	Fleet & Facilities Operations	
	h. Institute a "smart driving/fuel conservation" education program for municipal employees.	Medium	Fleet & Facilities Operations	
	i. Support alternatives to staff trips by auto for work-related meetings and events.	Short	Transportation	
	j. Evaluate more efficient transportation options for parking enforcement staff.	Medium	Public Works	
	k. Investigate partnership with Zipcar-like programs to support cost effective way to increase the availability of energy efficient or electric vehicles for City fleet.	Short	Transportation	
l. Increase use of bicycles and electric bikes for municipal operations.	Short	Transportation		

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		<i>m. Evaluate how electric vehicles could become a useful component of the City fleet.</i>	Medium	Fleet & Facilities Operations	
	<i>2. Establish a Sustainable Transportation and Land Use Team among the Public Works, Planning, and Economic Development and Redevelopment Departments.</i>	<i>a. Develop annual Team objectives and actions for Commission and City Council as defined in approved plans and report on past year's results.</i>	Short	Planning	Integrated in other objectives.
		<i>b. Report recommendations of the Sustainable Transportation and Land Use Team to the TPWC and Planning Commission for review, based on commission bylaws, prior to presentation to Council.</i>	Short	Planning	
		<i>c. Update Transportation Impact Fee project plan to include implementation of alternative transportation infrastructure projects that support infill projects outlined in the 2030 General Plan.</i>	Medium	Planning, Public Works	
		<i>d. Investigate additional opportunities for the Redevelopment Agency to participate in the implementation of the Climate Action Plan.</i>	Short	Planning, RDA	
		<i>e. Establish a standard review process to evaluate how City Capital Improvement Projects affect the implementation of the CAP.</i>	Medium	Planning, Public Works, RDA	
		<i>f. Provide leadership in the planning and implementation of the County rail corridor through the RTC.</i>	Short	Planning	
		<i>g. Quantify results of alternative transportation projects (trip reduction and mode split) when possible and use these data in vehicle trip projections to support planning and the implementation of infrastructure projects.</i>	Short	Transportation, Planning	
		<i>h. Evaluate local sales leakage and work with Redevelopment Agency to provide necessary services within county to reduce "over the hill" shopping.</i>	Medium	Planning, Public Works, RDA	
		<i>i. Evaluate per capita GHG emissions rather than project-scale GHG emissions to ensure compliance with General Plan and Climate Action Plan objectives.</i>	Medium	Planning	
		<i>j. Encourage development of affordable housing, retail services, and employment in areas of Santa Cruz best served by current or expanded alternative transportation options.</i>	Medium	Planning, RDA	
		<i>k. Continue to develop alternative transportation options to encourage a "Park Once" campaign.</i>	Short	Planning, Green Business, Transportation	
		<i>l. Continue to work with county and regional transportation leaders to explore options for additional funding sources on regional level to support multi-modal transportation infrastructure.</i>	Medium	Planning, Public Works, RDA	
		<i>m. Continue to implement intelligent transportation systems, roundabouts, signal timing/synchronization, intersection widening and other efficiency methods that decrease idling time and congestion.</i>	Short	Public Works	
	<i>3. Support implementation of the General Plan infill policies.</i>	<i>a. Require new development along commercial corridors to be at least two stories in height.</i>	Short	Planning	Reductions will be quantified in Sustainable Community Strategy.
		<i>b. Encourage zoning that would allow for the development of housing above single-story commercial buildings along corridors.</i>	Medium	Planning	
		<i>c. Investigate modifying parking control strategies beyond what's allowed in current parking ordinance for residential housing, businesses and major destination centers. Review parking fee structure for downtown and throughout the City.</i>	Short	Planning	
		<i>d. Investigate an "in-lieu-fee" option for meeting some parking requirements to support infill and alternative parking options.</i>	Short	Planning, Public Works	
	<i>e. Re-evaluate current accessory dwelling unit (ADU) standards to encourage additional ADU development.</i>	Medium	Planning		
	<i>4. Actively participate in the county and regional transportation planning working groups.</i>	<i>a. Advocate that METRO consider new cross-town public transit routes as defined in the MTS.</i>	Medium	Planning, Public Works	Reductions will be quantified in Sustainable Community Strategy.
		<i>b. Support sustainable transportation options within City-defined higher density development areas and employment centers.</i>	Medium	Planning, Public Works	
		<i>c. Advocate for transit that supports sustainable growth within the County.</i>	Short	Planning	
		<i>d. Work with AMBAG to create a Sustainable Community Strategy that supports the 2030 General Plan goals and policies.</i>	Short	Planning	

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COMMUNITY (programs, services, opportunities)				
1. Reduce within-town car trips by 10% by 2020.	a. Work with regional agencies to establish baseline values for vehicle trip makeup (origin/destination) for residents, businesses, municipalities and create baseline transportation numbers for in-town trips.	Short	Energy Management Office	19,091
	b. Continue to investigate and modify parking requirements and parking fees for new developments.	Short	Planning	
	c. Encourage use of ridesharing and car sharing as an alternative to single occupancy driving through business and commuter incentives and parking disincentives.	Medium	Public Works, Planning, Green Business	
	d. Support sustainable transportation education programs.	Short	Public Works	
	e. Provide incentives and infrastructure that support alternatives to single occupancy vehicles.	Short	Public Works, Planning	
	f. Make Santa Cruz a Scooter friendly community.	Short	Public Works, Planning, Green Business	
	g. Work with community groups to encourage pedestrian and bike events.	Medium	Transportation	
	h. Allow for events to receive permits to close off sections of Pacific if it reduces SOV driving and is financially sustainable.	Medium	Public Works, Planning	
	i. Investigate partnership with Zipcar-like programs to support use of energy efficient or electric vehicles for City residents.	Short	Public Works	
	j. Work with business and government partners to establish a "Car-Free by the Sea" ecotourism campaign.	Medium	Green Business, RDA	
	k. Allow car-free weekends or special events within the community (West Cliff, East Cliff, Pacific Ave.) if it reduces SOV driving and is financially sustainable.	Medium	Green Business, RDA	
	l. Continue to create more spaces for bikes and pedestrians on West Cliff Drive when feasible.	Long	Public Works, Planning	
2. Double bike ridership through the continued implementation of long term actions identified within the Bike Plan that complete a safe network of bike corridors by 2020.	a. Continue to provide periodic status reports on Bike Plan implementation to the TPWC and City Council.	Short	Transportation, Planning	9,546
	b. Complete a Quality Index assessment for Bicycle routes throughout the City and set targets to upgrade sections of key corridors to meet "Reasonable" or "Ideal" condition levels by 2020.	Short	Transportation, Planning	
	c. Continue to implement "Very High" and "High" priority projects defined in the Bike Plan to close gaps in the bicycle networks and connect major destinations and activity centers by 2020.	Short	Public Works	
	d. Work with County to design safe bike infrastructure across jurisdictional boundaries.	Medium	Transportation, Planning	
	e. Work with the RTC signage project to install bike route signs including directions and mileage indicators to common destinations.	Short	Transportation, RDA	
3. Reduce trips by car to and from elementary and secondary schools by 30% by 2020.	a. Work with school districts to quantify vehicle trip makeup.	Medium	Climate Action, Transportation	2,864
	b. Continue to work with school districts and solicit input from elementary, middle and high school parents to identify opportunities to decrease emissions from school commutes.	Short	Climate Action	
	c. Support school busing, carpooling, biking and walking options as alternatives to individual parent pick-up and drop-off.	Short	Climate Action	
	d. Support development of more "safe routes to school" for students to walk and ride to school and home.	Short	Transportation	
	e. Support ridesharing programs for schools .	Medium	Climate Action, Transportation	
	f. Continue to explore additional funding for projects that enhance bike and walk to school opportunities.	Short	Transportation, Planning	
4. Reduce regional workforce single occupancy vehicle commutes 10% by 2020.	a. Work with the local partners and regional transportation planning groups to support the use of the rail corridor as a supplemental regional commute option.	Medium	Planning, Public Works, RDA	6,831
	b. Support local and regional ride sharing programs.	Medium	Transportation	
	c. Support the Economic Development and Redevelopment Agency programs to retain and create jobs within SC to reduce number of trips "over the hill" commute by 10%.	Short	RDA	

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		<i>d. Encourage employers to develop tools and methods to decrease emissions from work commutes, including work at home, ride-sharing, vanpools and improving transit service to local businesses.</i>	Medium	Green Business	
		<i>e. Encourage businesses to provide bikes, electric bikes, electric vehicles, and scooters to employees for lunch time and work time errands.</i>	Short	Green Business	
	<i>5. Work with the METRO Transit District and others to increase local public transit ridership for multiple sectors of the community by more than 5% by 2020.</i>	<i>a. Recommend cost-effective first steps for immediate action for increased ridership.</i>	Short	Planning, Public Works	777
		<i>b. Advocate for federal, state and local funding to maintain public transit and provide new service on the rail corridor.</i>	Short	Planning, Public Works	
		<i>c. Encourage METRO to identify specific actions that would encourage new riders to use the bus/trolley system.</i>	Medium	Planning, Public Works	
		<i>d. Encourage METRO to define high frequency bus routes that may be funded, created, expanded or modified to enable new sectors of the community to use the transit system.</i>	Medium	Planning, Public Works	
		<i>e. Link community districts and redevelopment areas with high frequency transit services.</i>	Long	Planning, Public Works, RDA	
		<i>f. Seek funding for a weekend bus/trolley pilot program as defined and prioritized in the scoping process.</i>	Medium	Planning, Public Works, RDA	
		<i>g. Participate in RTC processes to develop a rail corridor that provides an economically viable trail and rail service by 2020.</i>	Short	Planning, Public Works	
		<i>h. Coordinate the rail corridor future use options with high density and/or employment centered development as outlined in the 2030 General Plan.</i>	Medium	Planning, Public Works, RDA	
		<i>i. Work with local and regional transportation partners to develop, fund and implement transit options to create a convenient, integrated and accessible transit system for within town, cross county and Monterey Bay Area commutes.</i>	Long	Planning, Public Works, RDA	
		<i>j. Identify and implement transit options that link the region with the proposed CalTrain Station in Pajaro.</i>	Long	Planning, Public Works, RDA	
		<i>k. Continue to work with the University on long range transportation planning as outlined in the settlement agreement.</i>	Medium	Planning, Public Works, RDA	
		<i>l. Continue to monitor ongoing development of Personal Rapid Transit.</i>	Short	Planning, Public Works	
	<i>6. Provide incentives for the switch of 20% vehicles to low-carbon/high-efficiency alternatives by 2020.</i>	<i>a. Continue to work with the Monterey Bay Electrical Vehicle Alliance and others to assess needs and develop future municipal and private charging infrastructure.</i>	Short	Transportation	1,412
		<i>b. Evaluate preferential or size appropriate parking for electric vehicles, ultra mini cars, and scooters.</i>	Short	Planning, Public Works	
		<i>c. Encourage education on the use of low-carbon vehicles and fuels.</i>	Medium	Transportation	
		<i>d. Promote the City's package of incentives for those who own and use low-carbon/high-efficiency fuel vehicles.</i>	Short	Transportation, Climate Action	
Chapter 6. WATER CONSERVATION AND SOLID WASTE MANAGEMENT					
Goal A: Continue to reduce per capita and total water use within the Santa Cruz service area.					
Goal B: Reduce GHG emissions through improved waste handling and increased recycling, composting, reuse and waste reduction.					
MUNICIPAL SECTOR					
	<i>1. Implement an updated City Water Conservation Plan to maximize water use efficiency.</i>	<i>a. Continue to implement Best Management Practices as outlined in the MOU with the California Urban Water Conservation Council.</i>	Short	Water Conservation	148
		<i>b. Comply with new State laws which mandates new water conservation measures.</i>	Short	Water Conservation	
		<i>c. Establish an ultra low water use policy for City buildings and operations and provide mechanisms to achieve policy goals by 2020.</i>	Medium	Water Conservation	
		<i>d. Partner with Central Coast Energy Services to integrate City low-flow toilet and showerhead replacement services into their low-income housing energy efficiency audit and retrofit services.</i>	Short	Water Conservation, Climate Action	
		<i>e. Report to Council annually on the water system energy use from standard and renewable sources, energy associated with desalination, and estimated GHG emissions.</i>	Short	Water Department, Energy Mgmt. Office	
		<i>f. Maintain a rate schedule that is based on cost of service and designed to provide an economic incentive for conservation.</i>	Medium	Water Department	

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	2. Increase or establish use of rainwater catchment and reclaimed/grey water, where appropriate.	a. Investigate emerging technologies that reuse water within residential and commercial buildings and make that information available to the public.	Medium	Green Building, Water Conservation	37
		b. Integrate new California grey water building/plumbing codes into Green Building Program.	Short	Green Building	
		c. Encourage grey water use and rainwater catchment systems where their use could accomplish water conservation objectives.	Short	Green Building, Water Conservation	
		d. Consider landscape and park uses for future reclaimed water projects, where such use is appropriate.	Medium	Water Conservation, Parks and Rec	
		e. Work with City Parks and Recreation and Water Departments on pilot composting toilet program for remote service areas.	Medium	Water Conservation, Parks and Rec	
		f. Continue to investigate reclaimed water opportunities.	Medium	Water Conservation, Parks and Rec	
	3. Continue to implement programs to become a zero waste City by 2030.	a. Implement actions to achieve 75% waste diversion by 2020.	Short	Public Works	6,271
		b. Expand construction and demolition waste reduction programs in partnership with the Green Building program.	Medium	Public Works, Green Building	
		c. Investigate options for processing food waste to generate renewable energy and/or useful products.	Medium	Public Works	
		d. Expand City policies to eliminate waste at its source.	Short	Public Works	
		e. Continue to review and revise City solid waste programs to maintain incentives, outreach programs and other activities designed to increase waste diversion.	Short	Public Works	
	4. Establish programs and services to support resource conservation and waste reduction as a daily action for all City staff.	a. Establish a Zero Waste Plan for City buildings and operations.	Medium	Public Works	Integrated in other objectives.
		b. Conduct Green Business waste audits of municipal buildings.	Short	Green Business, Energy Mgmt. Office	
		c. Implement practices to reduce paper use in City operations.	Short	Finance	
		d. Provide user-friendly composting options in all kitchen areas.	Short	Public Works	
		e. Establish City policies to reduce consumption. i.e., repairing equipment, digital distribution of documents.	Medium	Public Works	
		f. Implement digital permitting and plan check procedures.	Short	Planning	
	5. Reduce emissions from waste collection and fugitive sources by 10% by 2020.	a. Continue to meet and exceed State surface emission requirements at the landfill.	Short	Public Works	922
		b. Improve collection vehicle fuel efficiency and reduce trip VMT where possible. Purchase alternative fuel collection and sweeper vehicles as technology develops and regulations permit.	Long	Public Works, Fleet and Operations	
		c. Increase % of biofuel in diesel as equipment and regulations permit. Use locally-generated alternative fuels when available at a reasonable price.	Medium	Public Works, Fleet and Operations	
RESIDENTIAL SECTOR					
	1. Support implementation of Water Conservation Plan to maximize water use efficiency.	a. Continue to implement residential Best Management Practices as outlined in the MOU with the California Urban Water Conservation Council.	Short	Water Conservation	in M1
		b. Investigate and incentivize appropriate approaches to rainwater capture and grey water reuse.	Medium	Water Conservation	
		c. Pursue funding sources to provide rebates and reduce permit fees for cisterns.	Medium	Water Conservation	
		d. Support water efficient landscaping programs, classes and businesses.	Short	Water Conservation, Parks and Rec	
		e. Promote Central Coast Energy Services programs which includes the City's low-flow toilet and showerhead replacement services.	Short	Water Conservation	
		f. Expand support of permaculture and climate-appropriate plant programs and classes that help residents reduce water use.	Short	Water Conservation, Climate Action	

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	2. Reduce the amount of recyclable and compostable materials in the residential waste stream.	a. Define and implement programs that divert an additional 50% (below 2010 levels) of methane producing materials from landfill.	Medium	Public Works	in M3
		b. Expand or develop programs and services that directly address results of the 2010 Waste Characterization Study to move towards zero waste goal.	Medium	Public Works	
COMMERCIAL SECTOR					
	1. Support implementation of Water Conservation Plan to maximize water use efficiency.	a. Continue to implement commercial Best Management Practices as outlined in the MOU with the California Urban Water Conservation Council.	Short	Water Conservation	in M1
		b. Continue to emphasize water conservation as part of the Monterey Bay Area Green Business Program.	Short	Green Business	
		c. Per California Assembly Bill 1881, update the landscape water conservation ordinance for new developments and remodels.	Short	Water Conservation, Planning	
		d. Investigate and incentivize appropriate approaches to rainwater capture and grey water reuse.	Medium	Water Conservation	
		e. Develop strategies to further reduce water use on large commercial landscapes such as assigning water budgets and/or creating new fee structure.	Medium	Water Conservation	
	2. Reduce the amount of recyclable and compostable materials in the commercial waste stream.	a. Implement construction and demolition waste reduction programs in partnership with the Green Building program to comply with 50% reduction mandate of Cal Green State building code.	Medium	Water Conservation, Green Building	in M3
		b. Require new and remodeled developments to design appropriate and convenient inside and outside service areas that encourage recycling.	Medium	Green Building	
		c. Continue to emphasize waste reduction as part of the Monterey Bay Area Green Business Program.	Short	Green Business	
		d. Continue to support recycling and compost efforts at City schools and UCSC.	Short	Public Works, Climate Action	
		e. Continue to offer staff assistance in identifying waste reduction options for businesses and industry within the City limits.	Short	Public Works	
		f. Evaluate options and select method to achieve 50% commercial organic waste diversion by 2030.	Medium	Public Works	
		g. Implement State regulations mandating recycling at multi-family apartments and commercial buildings.	Short	Public Works	
		h. Encourage the use of local recycled and reused materials in partnership with local businesses.	Medium	Green Business	
Chapter 7. SOLAR SANTA CRUZ					
Goal: Ensure a sustainable transition toward locally-generated renewable energy through programs, policies and investments.					
MUNICIPAL SECTOR					
	1. Develop a Renewable Energy Plan as part of the Energy Efficiency Conservation Strategy to coordinate departmental investment in renewable energy to reach a 33% locally-generated renewable energy portfolio by 2020.	a. Complete a phase II solar feasibility study of City buildings and facilities that will include both solar photovoltaic and solar thermal options.	Short	Energy Mgmt. Office, Climate Action	2,527
		b. Create a solar expansion plan for the municipality.	Short	Energy Management Office	
		c. Participate in cooperative purchasing programs and public/private partnerships for energy efficiency and renewable energy services and infrastructure.	Medium	Climate Action, Finance	
		d. Investigate feasibility of forming/joining a Community Choice Aggregation that allows all businesses and residents (including renters) to use and support local investments in renewable energy.	Short	Climate Action	
		e. Equip electric car and bike charging stations with solar and other renewable energy generation.	Medium	Transportation	
	2. Partner with UCSC and other stakeholders to implement pilot projects that support development of emerging alternative energy technologies.	a. Find funding to support the development of the Coastal Energy Research Facility at the Municipal wharf and other locations.	Short	Climate Action	100
		b. Work with the City Economic Development and Redevelopment Agency to support investment in new energy technology businesses.	Medium	Climate Action, RDA	
COMMUNITY SECTOR					
	1. Implement the Solar Santa Cruz Program to increase the number of residential solar systems to 1000 by	a. Create a Solar Finance District for City residents.	Medium	Climate Action	7,228
		b. Identify and establish incentives to support the switch to renewable energy.	Short	Climate Action	

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	2012 and 5000 by 2020. (Approximately 500 at present.)	c. Work with Climate Action Compact partners to create a local offset fund to support renewable energy/sustainable planning projects within the community.	Short	Climate Action	
		d. Establish new planning, development and building policies to support appropriate use of emerging wind, solar, biomass and micro hydro technologies.	Medium	Planning	
		e. Establish a Solar Hot Water campaign and financing mechanism to increase the number of solar hot water systems to 2000 in the City.	Short	Climate Action, Water Department	
	2. Work with the Green Building Program to install renewable energy on 60% of new buildings and remodels by 2020.	a. Provide mechanisms (solar financing district, revolving funds, partnering with local banks) for new buildings to include solar as an integral part of the project.	Medium	Green Building, Climate Action	145
	3. Implement the Solar Santa Cruz Program to increase the number of solar systems installed on businesses to 100 by 2012 and 500 by 2020.	a. Support future Solar Financing programs and incentives adoption by the business community.	Medium	Green Business, Climate Action	1,822
		b. Encourage all new commercial and industrial development to include on-site renewable energy generation.	Medium	Green Building	
		c. Establish new planning, development and building policies to support appropriate use of emerging wind, solar, biomass and micro hydro technologies on large business properties.	Medium	Planning	
		d. Establish a Solar Hot Water campaign and financing mechanism to increase the number of solar hot water systems in the City.	Short	Climate Action, Water Department	
		e. Partner with Chamber of Commerce and other business associations to create incentives for landlords to invest in renewable energy generation on commercial properties. (30% penetration)	Medium	Green Business, Climate Action	
Chapter 8. PUBLIC PARTNERSHIPS, EDUCATION & OUTREACH					
Goal A: Identify and allocate funding and other resources for the implementation of the Climate Action Plan.					
Goal B: Support community implementation of the Climate Action Plan through public education, outreach, and programs.					
MUNICIPAL SECTOR					
	1. Establish a City Sustainability Team to coordinate ongoing implementation of the Climate Action Plan and ensure integration of actions with all City departments.	a. Identify ongoing funding to support program coordinator.	Short	Climate Action	100
		b. Coordinate implementation and completion of the Climate Action Plan by 2020.	Short	Climate Action	
		c. Conduct GHG Emissions Inventories at least every five years.	Short	Energy Mgmt. Office, Climate Action	
		d. Conduct periodic review and revision of the Climate Action Plan.	Medium	Climate Action, Planning, Public Works	
		e. Review Climate Adaptation Plan annually. Implement proposed actions as funding becomes available.	Short	Climate Action, Planning, Public Works	
		f. Work with the County and regional leaders to initiate an Energy Descent Plan for the Monterey Bay area.	Medium	Climate Action	
		g. Provide advocacy for effective State and Federal policies and lead by example through reporting of local reduction success.	Medium	Climate Action, Planning, Public Works	
		h. Establish a process for reporting a "GHG Emissions" section within appropriate Council reports to evaluate and analyze how actions support or are consistent with the City's GHG reduction goals.	Medium	Climate Action, Planning, Public Works	
		i. Enhance City policies that support continued investment in low carbon and sustainable products and services.	Short	Finance	
		j. Integrate City departments' operational implementation of the Climate Action Plan through coordination with staff of all relevant City programs and by establishing a Climate Action liaison in each department.	Short	Climate Action	
	2. Develop an outreach campaign to highlight City's sustainability efforts to date and engage various constituencies in achieving our	a. Quantify and report on the effectiveness of the implementation of the Climate Action Plan and make the information available to City Council, all City departments, partners, and the public.	Short	Climate Action, City Manager's Office	NA

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	<i>environmental goals.</i>	<i>b. Develop and implement fundraising strategy.</i>	Short	City Manager's Office, Climate Action	
		<i>c. Create effective marketing materials to keep the public up to date on CAP implementation status and new opportunities to participate.</i>	Short	City Manager's Office, Climate Action	
		<i>d. Establish, maintain and promote an interactive web portal dedicated to the Climate Action Program.</i>	Short	Climate Action, Planning, Public Works	
	3. Incorporate energy efficiency and resource conservation as daily actions for all City staff.	<i>a. Obtain Green Business Certification for City operations and facilities.</i>	Short	Green Business, Climate Action	Integrated in other objectives.
		<i>b. Work with City staff to create department level GHG reduction plans and put mechanisms in place to report on the status of implementation.</i>	Short	Energy Management Office, Climate Action	
		<i>c. Expand the Climate Action Teams Program for participation by City staff, Commissioners, and City Council members.</i>	Short	Climate Action	
		<i>d. Periodically report on City-wide GHG reduction goals attainment to City department staff.</i>	Medium	Climate Action, Planning, Public Works	
		<i>e. Create suggestion e-box for staff energy efficiency and resource conservation ideas.</i>	Short	IT, Climate Action	
	4. Support the establishment of sustainable purchasing procedures.	<i>a. Create a policy to guide the City in making sustainable purchasing decisions.</i>	Medium	Finance	To be Studied
		<i>b. Use City purchasing policies to advocate for reduced product packaging and lower embodied carbon content.</i>	Medium	Finance	
		<i>c. Develop a process to prioritize the purchase of Energy Star rated appliances and computer equipment for all City operations.</i>	Medium	Finance	
		<i>d. Advocate for additional legislation to mandate extended producer responsibility. Continue to implement current Extended Producer Responsibility policies.</i>	Medium	Finance	
	5. Continue leadership in the Climate Action Compact.	<i>a. Partner with regional municipalities to conduct GHG emissions inventories.</i>	Short	Energy Management Office, Climate Action	Significant but undetermined
		<i>b. Partner with regional municipalities to develop and implement local Climate Action Plans.</i>	Medium	Climate Action, Planning, Public Works	
		<i>c. Partner with regional municipalities to establish funding to support GHG reduction efforts.</i>	Medium	Climate Action, Planning, Public Works	
COMMUNITY SECTOR					
	1. Provide support for 20% of City residents to pledge and take action to reduce their emissions 30% by 2020.	<i>a. Expand the Climate Action Teams Program (CATP) to reach 10% of City residents (approximately 1200 families) and 50 businesses through partnerships with community groups, business districts, faith-based organizations, and schools.</i>	Short	Climate Action	2,600
		<i>b. Establish sustainable funding for the CATP.</i>	Short	Climate Action	
		<i>c. Increase web capacity for data collection and analysis, participant follow up, and online participant interaction that supports and builds a sense of community.</i>	Medium	Climate Action	
		<i>d. Explore opportunities for linking CATP with other local programs such as the Monterey Bay Area Green Business Program, AMBAG Home Energy Watch Program and RightLights Program.</i>	Short	Climate Action	
		<i>e. Investigate feasibility of linking CATP with subsidized home energy audit and retrofit program.</i>	Medium	Climate Action	
		<i>f. Expand and adapt CATP to specific sectors of the community through targeted promotional efforts, events, pilot programs, etc.</i>	Medium	Climate Action	
		<i>g. Work with regional municipal partners to find funding to initiate and implement CATP throughout the Monterey Bay Area.</i>	Short	Climate Action	
	2. Support continued investment in City greenspace, parks and other fun things!	<i>a. Support community tree plantings, open space enhancement, and gardens.</i>	Short	Parks and Rec, Climate Action	Significant but undetermined
		<i>b. Increase the number of community gardens.</i>	Short	Parks and Rec, Climate Action	

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		<i>c. Increase and enhance urban forests.</i>	Short	Parks and Rec, Climate Action	
		<i>d. Evaluate potential for a residential excess harvest program that could integrate with food assistance programs and farmers markets, modeled after the Portland Fruit Tree Project.</i>	Medium	Parks and Rec, Climate Action	
		<i>e. Continue to support local farmers' markets and work to provide sufficient locations and increased infrastructure.</i>	Short	Public Works	
		<i>f. Incentivize water-efficient greenscape and reduced use of asphalt in new development.</i>	Medium	Planning, Parks and Rec, Public Works	
		<i>g. Complete Arana Gulch multi-use trail and habitat restoration project.</i>	Short	Planning, Parks and Rec, Public Works	
	3. Support and expand programs to enhance sustainable options for those living and working in, as well as visiting, Santa Cruz.	a. Support ongoing public efforts to increase climate change awareness, action, and advocacy.	Short	Climate Action	Significant but undetermined
		b. Support coordination and promotion of films, events, speakers, and forums related to climate change.	Short	Climate Action	
		<i>c. Work with local non profit organizations to enhance the reach of their sustainability programs.</i>	Short	Climate Action	
		d. Promote product repair and reuse businesses.	Medium	RDA	
		e. Support the Buy Local campaign as a GHG reduction tool.	Short	Climate Action	
	4. Continue to coordinate and promote sustainable choices within the business community.	a. Increase the number of certified Monterey Bay Area Green Businesses.	Short	Green Business	Integrated in other objectives.
		b. Conduct pilot programs such as Green Wave Campaign to contribute to a local green economy.	Medium	Green Business, Climate Action, RDA	
		<i>c. Establish an online Climate Action Program web portal and social media network to enhance collaboration and resource sharing amongst businesses and residents.</i>	Medium	Green Business, Climate Action, RDA	
		d. Create awareness of Green Business/commercial sustainability efforts through signs in businesses and in business districts.	Medium	Green Business, Climate Action, RDA	
		e. Expand City and partner programs which enhance education to all owners, employees, and customers of businesses within the City regarding energy efficiency, resource conservation, and climate change programs and policies.	Short	Green Business, Climate Action, RDA	
		f. Work with the business community to find ways to incorporate the Climate Action Teams Program into company environmental programs as well as explore potential funding mechanisms.	Medium	Green Business, Climate Action, RDA	
	5. Partner with schools and higher education institutions to promote sustainable choices and policies.	a. Continue to work with the Santa Cruz City Schools District as they complete their GHG Emissions Inventory and develop their Climate Action Plan.	Short	Climate Action	Reductions will be quantified in partner CAPs.
		b. Use experience gained from pilot program with Gateway School to support and inform elementary, middle and high school GHG reduction and climate change education.	Short	Climate Action, Green Business	
		<i>c. Promote Green Business certification of Santa Cruz City Schools.</i>	Short	Climate Action, Green Business	
		d. Explore opportunities to engage high school students in reducing their personal GHG emissions as well as becoming leaders in community-wide GHG reductions.	Medium	Climate Action, Green Business	
		e. Continue to collaborate with UCSC to support implementation of their Climate Action Plan and develop avenues through which staff and students are empowered to reduce their GHG emissions as well as campus-wide emissions.	Short	Climate Action	
		f. Work with schools to develop opportunities for creating additional community gardens on their campuses.	Short	Climate Action, Parks and Rec	
		g. Explore the idea of planting trees on school campuses through the City Tree Program.	Medium	Climate Action, Parks and Rec	