

CLIMATE CHANGE - WORK PLAN FISCAL YEAR 2010

PASADENA GREEN CITY ACTION PLAN AND UNITED NATIONS URBAN ENVIRONMENTAL ACCORDS (UEA)

Urban Environmental Accords Over-arching Vision: To build an ecologically sustainable, economically dynamic, and socially equitable future for urban citizens.

Urban Environmental Accords Implementation Results: For all members of society to realize the right to a clean, healthy, and safe environment.

THEMATIC AREA – CLIMATE CHANGE¹					
VISION STATEMENT: (Pasadena does not have a vision statement specific to climate change)					
GOAL	METRICS/DATA	STRATEGY	STRATEGY LEAD DEPT. / SUPPORT	FY 2010 ACTIONS	ACTION LEAD DEPT. / SUPPORT
Goal 1: Climate Change (UEA 3) » <i>By 2020 reduce the city's greenhouse gas (GHG) emissions 25% below 2005 levels²</i> Goal 1.1: PWP GHG Reductions – Reduce electrical utility generated GHG emissions <ul style="list-style-type: none"> • 5% by 2010 • 25% by 2015 • 40% by 2020⁴ 	Unit = CO2E in metric tons Indirect and direct sources 2007 Baseline	Strategy 1.1: Prepare a citywide greenhouse gas (GHG) inventory. ³ Timeframe: FY 2010 Completed	P&D/DOT,PWP, PW,ATTORNEY	1. Backcast 1990 GHG emissions levels. 2. Establish 2007 GHG baseline. 3. Forecast 2020 GHG emissions levels (business as usual and recently adopted programs).	1,2, & 3 P&D/DOT,PWP, PW,ATTORNEY
	One finalized plan One accounting system	Strategy 1.2: » <i>Prepare a greenhouse gas reduction plan and accounting system (UEA 3).</i> Timeframe: FY 2010 Completed	P&D/DOT,PWP, PW, ATTORNEY	1. Review future programs/actions developed in GHG reduction plan prepared by consultant. 2. Public, Commission & City Council review and adoption. 3. Develop monitoring program.	1. P&D/DOT,PWP, PW, ATTORNEY 2. P&D 3. P&D
	Comparative CO2E	Strategy 1.3: Assess land use alternatives for impact on greenhouse gas emissions as part of the Land Use Element update. Timeframe: FY 2010 Initiated	P&D		
	Unit = CO2E in metric tons 2008 Baseline	Strategy 1.4: Prepare a municipal fleet inventory and calculate GHG emissions. Timeframe: FY 2010 Completed	PW/PH	1. Incorporate fleet inventory into GHG inventory. 2. Develop GHG reduction measures related to city fleet.	1. P&D/PW 2. PW/P&D

¹ Climate Change is not a UEA thematic area but listed under Energy. As Climate Change is associated with most of the UEA Actions it has been afforded a separate table for this exercise.

² This goal is more progressive than UEA Action 3 (25% reduction by 2030) and meets California State AB 32 requirements and the US Conference of Mayors Climate Action Agreement.

³ US Conference of Mayors Climate Protection Agreement item 1.

⁴ GHG reduction goal adopted in Energy IRP and specific to PWP electricity generation. Supports Goal 1.

THEMATIC AREA – WASTE REDUCTION

VISION STATEMENT: (Pasadena does not have a vision statement specific to waste reduction)

GOAL	METRICS/DATA	STRATEGY	STRATEGY LEAD DEPT. / SUPPORT	FY 2010 ACTIONS	ACTION LEAD DEPT. / SUPPORT
<p>Goal 1: Zero Waste (UEA 4)- »Divert citywide waste from landfills:</p> <ul style="list-style-type: none"> • 75% by 2015 • 100% by 2040⁵ 	<p>Annual waste in tons generated city wide.</p> <p>Annual solid waste in tons sent to landfills.</p> <p>Annual solid waste in tons recycled/diverted from the landfill</p>	<p>Strategy 1.1: »Prepare a Zero Waste Strategic Plan with implementation actions <i>and user friendly recycling and composting programs (UEA 6).</i>⁶</p> <p>Timeframe: FY2010 Initiated</p>	<p>PW</p>	<ol style="list-style-type: none"> 1. Await actions determined by plan in addition to those listed below. 2. Develop an administrative procedure to ensure development and construction of new structures is in compliance with the Zoning Code (17.40.120) on-site recycling areas. 3. Amend Construction and Demolition Debris Ordinance to increase diversion requirements for construction projects. 4. Present to City Council Extended Producer Responsibility (EPR) resolution promoting manufacturer’s responsibility. 	<ol style="list-style-type: none"> 1. PW 2. P&D/PW 3. PW 4. PW
<p>Goal 1.1: Product Waste (UEA 5) - »Adopt an ordinance reducing the use of a disposable, toxic, or non-renewable product category by 50% by 2012.⁷</p>	<p>(Goal cannot be measured independently but by decreasing overall annual solid waste diverted from landfills.)</p>			<ol style="list-style-type: none"> 1. Develop single-use carryout bag reduction program. 2. Develop a polystyrene food container reduction program. 	<ol style="list-style-type: none"> 1. P&D/PW 2. P&D/PW

UEA 6 Consumer Waste (See Strategy 1.1 – supports zero waste Goal 1)

⁵ Establishes a realistic interim target and date for achieving UEA 4 – Zero waste to landfills by 2040.

⁶ Replaces UEA Action 6 Consumer Waste which states “Implement user friendly recycling and composting programs with the goal of reducing by 20% per capita solid waste disposal to landfills and incineration by 2012. Per capita reduction cannot be quantified based on consumer programs. This action is a means of supporting zero waste (UEA Action 4) and the US Conference of Mayors Climate Protection Act #10 – increase recycling rates in the community.

⁷ Goal 1.1. UEA Action 5 supports the over-arching Goal 1. An ordinance restricting single-use carryout bags or restricting polystyrene will satisfy the intent of UEA Action 5.

THEMATIC AREA – URBAN DESIGN, TRANSPORTATION AND URBAN NATURE

VISION STATEMENT: Pasadena is a city with » *higher density, mixed use, walkable, bikeable and disabled-accessible neighborhoods which coordinate land use and transportation with open space systems for recreation and ecological restoration (UEA 8).*⁸

GOAL	METRICS/DATA	STRATEGY	STRATEGY LEAD DEPT. / SUPPORT	FY 2010 ACTIONS	ACTION LEAD DEPT. / SUPPORT
Goal 1: Planning Documents - Ensure that new or amended planning documents contain objectives, policies and implementation measures that support the vision statement. ⁹	One adopted plan	Strategy 1.1: Land Use Element - Include sustainability and UEA Actions in the Land Use Element update. ¹⁰ Timeframe: FY 2011 City Council Adoption	P&D	1. Initiate Land Use Element Update public outreach process 2. Evaluate land use alternatives proposed in the Land Use Element Update against sustainability goals (see also Climate Change table)	1. P&D 2. P&D
	One set of standards	Strategy 1.2: Sustainable Master Plan - Develop a menu of sustainability options for evaluation in all master plans and master plan amendments. Timeframe: FY 2010 Completed	P&D	1. Internal planning team to develop sustainability options.	1. P&D
	One adopted plan	Strategy 1.3: Bicycle Master Plan - Include sustainability and UEA Actions in the Bicycle Master Plan update. Timeframe: FY 2011 City Council Adoption	DOT	1. Await actions determined by plan.	1. DOT
	One adopted plan	Strategy 1.4: Open Space and Conservation Element - Include sustainability and UEA Actions in the Open Space and Conservation Element. ¹¹ Timeframe: FY 2011 City Council Adoption	P&D	1. Community workshops held 2. Open Space Plan drafted & circulated for public comment	1. P&D 2. P&D

⁸ UEA Action 8 does not contain a measurable target, goal or timeline; does not reflect Pasadena's General Plan principles; nor is it in alignment with the city's other adopted plans, policies and regulations (include urban forest in language). UEA 8 is similar to US Conference of Mayors Climate Protection Agreement #2 – "Adopt and enforce land use policies that reduce sprawl, preserve open space, and create compact, walkable urban communities."

⁹ Initiative approved in 2006 Green City Action Plan - lacks specifics (target and measurable results).

¹⁰ Element update will include specific goals, strategies and actions. The Land Use Element should address UEA Action 12 - "Protect critical habitat corridors and other key habitat characteristics from unsustainable development."

¹¹ Element update will include specific goals, strategies and actions. The Open Space Element should address UEA Action 10 – "Ensure that there is an accessible public or recreational open space within half a kilometer (.31 miles) of every resident by 2015" and UEA Action 12 - "Protect critical habitat corridors and other key habitat characteristics from unsustainable development"

One plan + % of residential & mixed use parcels within ¼ mile of public transit. (No means for measuring S.O.V.)	Strategy 1.6: Mobility Element - Include sustainability and UEA Actions in the Mobility Element. ¹² Timeframe: FY 2011 City Council Adoption	DOT	1. Await actions determined by plan.	1. DOT
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THEMATIC AREA – WATER

VISION STATEMENT: Pasadena has a sustainable portfolio of water supply and water conservation solutions that protect the *ecological integrity of the drinking water source (UEA 19)*, that ensure *adequate access to safe drinking water (UEA 19)* and that support *sustainable urban watersheds (UEA 21)* and aquifers.¹³

GOAL	METRICS/DATA	STRATEGY	STRATEGY LEAD DEPT. / SUPPORT	FY 2010 ACTIONS	ACTION LEAD DEPT. / SUPPORT
Goal 1: Water Reduction (UEA 19) - »By 2015 reduce the city's water usage 10% per capita below 2005 levels, and 20% by 2020 ¹⁴	Water in acre feet supplied by PWP to customer base. 2005 Baseline	Strategy 1.1: Prepare a Water Integrated Resource Plan Timeframe: FY 2010 Initiated	PWP	1. Await actions determined by plan in addition to those listed below. 2. State Model Water Efficient Landscape Ordinance adopted. 3. Irrigation efficiencies program initiated. 4. Landscape water meters study initiated. 5. Gray water information developed. 6. Rainwater capture information available to customers. 7. Fixture Replacement Program developed. 8. Building Codes and new Development recommendations initiated 9. »Pursue implementation of Reclaimed Water System Project. (UEA 21)	1. PWP 2. P&D/PWP 3. PWP 4. PWP 5. PWP/P&D 6. PWP/P&D 7. P&D/PWP 8. PWP

¹² Element update will include specific goals, strategies and actions. The Mobility Element should address UEA Action 13 - "Expand affordable public transportation to within ½ mile of all city residents by 2015" and UEA Action 15 - "Implement a policy to reduce the percentage of commute trips by single occupancy vehicles by 10% by 2012."
¹³ UEA Action 20 Protect the ecological integrity of the city's primary drinking water sources is a vision without a target or goal; primary water supplies are from the MWD which the City does not control. It may be appropriate to create a vision statement for water through the Water Integrated Resource Plan process and in concert with the Open Space and Conservation Element. policies and objectives.
¹⁴ UEA Action 19 stipulation of 10% per capita reduction by 2015 and California State requirement of 20% by 2020.

THEMATIC AREA - ENERGY

VISION STATEMENT: Pasadena is energy independent with reliable and environmentally responsible electric service at competitive rates.¹⁵

GOAL	METRICS/DATA	STRATEGY	STRATEGY LEAD DEPT. / SUPPORT	FY2010 ACTIONS	ACTION LEAD DEPT. / SUPPORT
<p>Goal 1: Renewable Energy Portfolio (UEA 1) – » <i>Increase the renewable energy portfolio to</i></p> <ul style="list-style-type: none"> • 15% by 2010, • 33% by 2015, and • 40% by 2020.¹⁶ 	Renewable energy in MW as percentage of total energy	See Goal 1.1 and 1.2			
<p>Goal 1.1: Feed In Tariff - By 2020, procure 10 MW of renewable power from “feed-in” tariff sources within Pasadena.¹⁷</p>	PV in MW (project totals)	<p>Strategy 1.1: Prepare a Cost of Service Study.</p> <p>Timeframe: FY2010 Initiated</p>	PWP		
<p>Goal 1.2: Renewable Solar Electricity – Install locally-owned solar photovoltaic power</p> <ul style="list-style-type: none"> • 3 MW by 2010 • 10MW by 2015 • 15 MW by 2020 • 19 MW of by 2024 	PV in MW (project totals)	<p>Strategy 1.2: Prepare a citywide solar power feasibility study</p> <p>Timeframe: FY 2010 Completed</p>	PWP		
<p>Goal 2: Coal Reduction - By 2016 reduce coal power purchases from the Intermountain Utah plant by at least 35 MW.</p>	MW energy reduced from baseline	<p>Strategy 2.1: TBD</p>	PWP		

¹⁵ Energy IRP 2009. Supports UEA Action 3 – Reduce greenhouse gas emissions.

¹⁶ Replaces UEA Action 1: 10% peak load replaced with renewable energy by 2012. New goal is more progressive and tailored to Pasadena. Complies with US Conference of Mayors Climate Protection Act #4 – Increase the use of clean, alternative energy and advocating for the development of renewable energy sources.

¹⁷ Goal 1. 1 and Goal 1.2 are components in support of the over-arching Goal 1 - Renewable Portfolio of 40% by 2020.

Goal 3: Energy Efficiency (UEA 2) – »Through energy efficiency reduce the City’s annual electricity consumption by an average of 1.33% per year and reduce summer peak demand by 6.8% over 10 years. ¹⁸	MW as percentage of total energy from the 2007 base year	Strategy 3.1: Prepare a Citywide Energy Efficiency Study. Timeframe: FY2010 Initiated	PWP		
		Strategy 3.2: Prepare a Municipal Operations & Facilities Energy Efficiency Study. Timeframe: FY2010 Initiated	PW/PWP	1. Replace 100% of incandescent traffic signals with energy saving lights (LED). 2. Install load shifting devices at municipal buildings. 3. Retrofit buildings with T-8 and LED lighting (EECBG).	1. PW 2. PW 3. PW
Goal 4: Local Gas Fired Generation: Ensure reliability in delivering projected electricity needs by retiring 65 MW of local gas fired electricity by 2014.	65 MW replaced	Strategy 4.1: Prepare Repowering Project Study for replacement of Glenarm Steam Plant with combined cycle plant. Timeframe: FY2010 Initiated	PWP		

¹⁸ Replaces UEA Action 2 – Energy Efficiency: Adopt and implement a policy to reduce the city’s peak load by 10% through energy efficiency. New goal is tailored to Pasadena and is more applicable to calculating performance of programs.