



City of Sacramento

Sustainability Best Practices Activities



Platinum Level Award Winner

















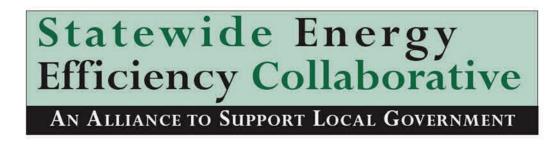




About This Document

This document tracks and shares local agency best practice activities completed and counted as part of a city or county's participation in the climate change and sustainability recognition program, the Beacon Award: Local Leadership toward Solving Climate Change. The Beacon Award is a statewide program recognizing cities and counties that are working to reduce greenhouse gas emissions, save energy and adopt policies and programs that promote sustainability.

The Beacon Award is sponsored by the Institute for Local Government and the Statewide Energy Efficiency Collaborative. The Statewide Energy Efficiency Collaborative (SEEC) provides support to cities and counties to help them reduce greenhouse gas emissions and save energy. SEEC is an alliance between three statewide non-profit organizations and California's four Investor-Owned Utilities. It builds upon the unique resources, expertise and local agency relationships of each partner.

















The Beacon Program is funded by California utility ratepayers and administered by Pacific Gas and Electric Company, San Diego Gas and Electric, Company, Southern California Edison and Southern California Gas Company under the auspices of the California Public Utilities Commission.





















City of Sacramento

Best Practice Activities

www.ca-ilg.org/BeaconAward/



Energy Efficiency and Conservation Activity

Level	Energy Efficiency and Conservation Activity	Reported
Silver	1. Green Facilities program provides energy audits, design, implementation, and measurement/verification for city facility energy efficiency retrofits. Facility retrofits completed as part of this program to date utilized \$1.9 million in EECBG funding and obtain about \$500,000 in rebate; they include the Sam Pannell Community Center, the Central Downtown Library, and eight city parking garage LED lighting retrofits. Total energy savings range from 36%-50% per project. Each city department will pay back their loan through estimated energy savings from the projects plus a 3% interest rate to cover administrative costs.	5-2014

Level	Energy Efficiency and Conservation Activities	Reported
Gold	 Green Information Technology ("Green IT") Retrofits. The city completed a Data Center Energy Efficiency Project in 2009, in partnership with SMUD, that will achieve energy savings of over 100,000 kWh per year. Additional items underway as part of the city's "Green IT" strategy include: EnergyStar purchasing standards for all replacement computers, displays, printers and copiers; server virtualization and consolidation; and a centralized remote power management system. Streetlight LED Pilot Project and Replacement Program: the City developed a pilot program in 2010, in partnership with SMUD, to test feasibility and performance of LED technology in various locations in the city. Additional testing and citywide deployment are pending the final outcomes of the pilot program, which is expected to be completed in 2012. Preliminary estimates of citywide LED conversion include energy savings of over 5.4 million kWh per year by 2020. 	5-2014





















Level	Energy Efficiency & Conservation Activities	Reported
Platinum	1. Traffic Signal LED Replacement Program: The city initiated an LED traffic signal replacement program in 1996. As of 2009, 85% of the city's traffic signals had already been converted to LEDs. Annual traffic signal energy usage between 2001 and 2008 decreased by approximately 3.3 million kWh, a cumulative reduction of about 54%. Additional conversions between 2009 and 2015 will result 100% system conversion to LEDs, and additional energy savings of about 575,000 kWh.	5-2014
	2. Clean Energy Sacramento (PACE Program): The city initiated the formation of a Property Assessed Clean Energy (PACE) financing program in 2011, in partnership with Ygrene Energy Fund, Inc. to help fund energy efficiency retrofits and renewable energy installation on existing buildings. The program is expected to leverage over \$100 million in private investment and create approximately 1,500 jobs in the first five years of operation.	
	3. Complete Energy Solutions for Small Business: The city and SMUD formed a partnership to create this pilot program, which offers small businesses rebates that cover up to 80% of the cost of energy efficiency retrofits. In 2011, 92 businesses chose to participate in the program. Average energy savings are expected to be about 20% per participant. Because of the success of the pilot, SMUD will be expanding it with a commitment of an additional \$3 million in 2012.	

























Water & Wastewater Systems **Activity**

Level	Water & Wastewater Systems Activity	Reported
Silver	1. Water, Sewer and Drainage Pumping Efficiency and System Optimization: Building on the success of past demand side management, system optimization and efficiency improvements in the late 1990's and early 2000s, the city's Department of Utilities has since 2005 has replaced pumps with variable frequency drives (VFDs) at a number of locations. VFD replacements since 2005 have resulted in over 289,00 kWh in energy savings per year.	5-2014

Level	Water & Wastewater Systems Activities	Reported
Gold	 Centralized, Weather-Based Control Systems in City Parks: Since 2005, over 500 acres in 55 City parks have been retrofitted with new, water-conserving irrigations systems with weather station or sensor-based irrigation control technology. Two of the city's golf courses were retrofit with centralized weather-based control systems in 2011. Advanced Metering Infrastructure (AMI) Field Leak Investigations: The city's Water Conservation staff implemented 1,000 AMI Field Leak Investigations in 2010 and 2011, followed up with Water Wise House Calls to promote water use efficiency and encourage the repair of leaky or substandard fixtures. Estimated water savings from the program are about 236 million gallons per year. 	5-2014























Level	Water and Wastewater Systems Activities	Reported
Platinum	1. Water Audits and Conservation Kits: The city's Water Conservation Office offers free indoor and outdoor water audits/surveys to existing residential and commercial customers with high water use, and provides customized reports to the homeowners or property owners. Water retrofits kits are also provided at no cost to residential customers (including low-flow fixtures, hose shut-off nozzles, etc.). In 2011, the city provided 718 free residential assistance audits.	5-2014
	2. Rebates for High-Efficiency Toilets, Washers, and Irrigation Systems: The city provides residential and commercial rebates for efficient toilets and clothes washers, as well as irrigation controllers or systems which result in improved outdoor efficiency. In 2011, the city provided 588 toilet rebates and 394 washer rebates to residential customers.	
	3. Water Wise Demonstration Garden: The city's new Water Wise Garden was completed in May 2011 at the city's Water Conservation Office , and includes native and drought tolerant plants, low-volume irrigation, mulch, and other water-saving features. Educational signage provides additional tips on ways that residents can implement water efficient practices while still maintaining a beautiful landscape. The garden is 44% more water efficient than the previous landscaping at the site, and is open to the public year-round for viewing.	

























Green Building Activity

Level	Green Building Activity	Reported
Silver	1. Minimum Green Building Standards for all New City Facilities: In 2004, the city council adopted a policy establishing goals for all new facilities to meet LEED standards, with Silver or better as a goal. Since the policy was adopted, six new city facilities were designed and constructed pursuant to this policy between 2005 and 2010, all of which have met LEED Silver or Gold and certified by the US Green Building Council. All six have also exceeded California Title 24 Building Energy Efficiency Standards by at least 20% or more. The city received the Green California Leadership Award in 2011 for these certifications.	5-2014

Level	Green Building Activities	Reported
Gold	City/County Joint Green Building Task Force: In 2010, the city and county convened a joint task force of construction, design, real estate, and clean energy industry experts and practitioners to examine green building policy options for existing and new buildings, and to make recommendations on both mandatory and voluntary options to increase green building in Sacramento. The final report was completed in late 2010, and presented to the City Council for review in early 2011.	5-2014
	 Entertainment and Sports Center: Sacramento's ESC will be certified LEED-Gold. Its location and design will support smart growth principles and will encourage public transit use and pedestrian and bicycle transportation. Demolition started in the summer of 2014, construction will start fall of 2014, and the project will be completed September 2016. 	





















Level	Green Building Activities	Reported
Platinum	1. Capital Area Plug-In Electric Vehicle Coordinating Council: In 2011, the city began participating in a regional planning process led by Sacramento Council of Governments (SACOG), Sacramento Municipal Utility District (SMUD), Sacramento Metropolitan Air Quality Management District (SMAQMD), and others to develop a regional Plug-in EV Readiness plan, in coordination with the Statewide Plug-in Electric Vehicle Collaborative. Included in the process will be building permit streamlining, and identifying regionally-consistent minimum development standards to ensure that new development is electric vehicle ready.	5-2014
	2. Climate Action Plan Consistency Review Checklist: The CAP Consistency Review Checklist is a planning tool for implementing Climate Action Plan (CAP) measures which apply to development projects. The Checklist addresses traffic calming and VMT reduction, pedestrian and bicycle facilities, on-site renewable energy systems, water efficiency (CalGreen Tier 1). All of these are above and beyond California Building Code requirements. The Checklist applies to projects that are not exempt from the California Environmental Quality Act (CEQA).	
	3. Green Team: In March 2011, the city formed an official "Green Team" that includes both building and planning staff in the Community Development Department that tracks permitting and policy issues related to green building, solar, PACE financing, etc. The Green Team has identified solutions to solar permit and fee streamlining, creation of a Commercial PACE program permitting guide, and vetting of potential options for implementing a green building program based on CALGreen and phasing in Tier 1.	

























Waste Reduction and Recycling Activity

Level	Waste Reduction Activity	Reported
Silver	1. Green Yard Waste Program: The city's solid waste services include diversion, recycling, and composting of green yard waste. In addition, over the past five years, the city has been actively promoting use of green yard waste bins, rather than loose-in-the-street green waste collection, to increase waste diversion, improve the fuel efficiency of the collection system and reduce physical damage to streets. As of 2011, over 85% of solid waste customers were using the green waste bins. Much of the green waste collected is processed into mulch or compost, or other products to be re-used in landscaping in agency facilities, or sold to private vendor for processing into compost/mulch for resale to the public. The city is also working with local partners to explore the feasibility of creating a green-waste-to-energy facility.	5-2014

Level	Waste Reduction Activities	Reported
Gold	 Multi-Family Recycling Ordinance: In 2010, the Sacramento Regional Solid Waste Authority (SWA) adopted SWA Ordinance No. 20, Title IV, requiring that multi-family dwellings with five or more units and who subscribe to ten cubic yards a week or greater of garbage collection service must recycle designated recyclable materials from their garbage. This applies to multi-family dwellings located in the unincorporated areas of Sacramento County and in the City of Sacramento. Construction & Demolition Waste Diversion Ordinance: In 2009, the City adopted an ordinance requiring construction & demolition waste be diverted for recycling or reuse for all projects over \$250,000 in value requiring a building permit. In 2010, the ordinance was amended to be consistent with minimum CalGreen requirements that 50% of all waste be diverted for all new construction, regardless of value. 	5-2014





















Level		Waste Reduction Activities	Reported
Platinum	1.	In-Region Waste Disposal Policy: In 2010, the city council amended its solid waste hauling franchise agreement to shift end-disposal of the city's municipal solid waste to the Kiefer Landfill in Sacramento County, rather than exporting it out of state to Lockwood, NV. The changes will result in a net reduction of over 1.2 million vehicle miles traveled (VMT) per year from heavy duty trucks, and over 1,800 metric tons of CO2 per year, resulting in a more efficient and climate-friendly waste collection and disposal system.	5-2014
	2.	Waste Reduction & Recycling Community Education Programs: The city offers a number of free or low-cost educational programs, incentives, and information, including school and community group presentations to learn about the "3 Rs", free seminars and reduced-cost compost bins for backyard composting, information about vermicomposting and grasscycling, links to various external resources including CalRecycle, Kids Be Green, etc.	
	3.	Food to Fuel Pilot: In April 2014, the city implemented a neighborhood pilot food scraps collection program. Over the next 12 months food scraps collected from approximately 800 homes will be delivered to the Sacramento Bio Digester to be converted to fuel.	

























Climate-friendly Purchasing Activity

Level	Climate-Friendly Activity	Reported
Silver	1. Sustainable Purchasing Policy: In 2010, the city manager adopted a comprehensive sustainable purchasing policy. The objectives of the policy are to conserve natural resource, save water and energy, minimize environmental impacts, eliminate or reduce toxic materials, support recycling and products made of recyclable/reused materials, use vendors that reduce environmental impacts in their production and distribution system, etc.	5-2014

Level	Climate-Friendly Activities	Reported
Gold	 Sustainable Purchasing Policy requires the city purchased 100% recycled paper, postconsumer recycled content cardboard in office supplies. Sustainable Purchasing Policy restricts the purchase of bottled water. 	5-2014

Level	Climate-Friendly Activities	Reported
Platinum	Sustainable Purchasing Policy requires sustainable cleaning and janitorial products and services.	5-2014
	Sustainable Purchasing Policy requires the purchase of 100% remanufactured printer cartridges.	
	Sustainable Purchasing Policy requires the purchase of EnergyStar electronics and appliances, energy efficient lighting, water-saving fixtures and appliances.	























Renewable Energy and Low-Carbon Fuels Activity

Level	Renewable Energy and Low Carbon Fuels Activity	Reported
Silver	1. Solar Power Purchase Agreement (PPA) for City Facilities: The city entered into a PPA with Solar City to fund the installation of 3.4 MW of solar on existing city facilities. At the end of 2011, just under 2 MW were installed on existing buildings or on new parking lot shade canopies. About 1.5 MW will be installed by the end of 2012 at the city's water treatment plants.	5-2014

Level	Renewable Energy and Low Carbon Fuels Activity	Reported
Gold	1. Solar Permit Streamlining: In 2011, the city adjusted building permit fees for residential and commercial solar PV systems to a graduated flat-fee based system, rather than valuation, resulting in over 60% savings in permitting costs for a typical residential solar installation. The city also created a "Guide to Solar Energy System Permitting" which highlights the general process, fee schedule, and standards and submittal requirement for solar projects that require planning or building review.	5-2014
	2. Low Carbon Fuel Vehicles and Infrastructure: Since 2005, the city has replaced a significant portion of its fleet with vehicles that can utilize low carbon fuels such as liquefied natural gas (LNG), propane, and E-85 (85 percent ethanol, 15% unleaded gasoline). The city has also installed alternative fuel infrastructure (fuel pumps, tanks, etc.) at key city facilities.	

Level	Renewable Energy and Low Carbon Fuels Activity	Reported
Platinum	Green Refuse Trucks: In 2011, the city replaced 53 (about half of the total inventory) diesel refuse trucks with cleaner Liquefied Natural Gas (LNG) trucks. The LNG trucks are 50 percent cleaner than the diesel trucks.	5-2014
	2. Renewable CNG: In 2013, the city established a sourcing agreement for up to 2,500 gallons of Compressed Natural Gas (CNG) per week with at least 30% renewable CNG at the Sacramento Bio Digester fueling station. This fuel will be used to power 14 CNG refuse trucks.	
	3. Community Solar: In partnership with SMUD and Conergy, a 1.5 megawatt photovoltaic system has been installed at Sutter's Landing Park, a former landfill site. There are three solar configurations at the site: a ground mount system, solar trees in the dog park and a solar canopy in the visitor parking area to provide much needed shading.	























Efficient Transportation Activity

Level	Efficient Transportation Activity	Reported
Silver	1. Sustainable Operations Policy: In 2007, the city council adopted a policy that sets fleet efficiency standards, sets fuel reduction targets, and calls for sustainable fleet operations programs for all vehicles in the city's fleet. Significant reductions in total city fleet fuel usage were achieved between 2005 and 2009, despite an increase in the size of the city's fleet during the period.	5-2014

Level	Efficient Transportation Activities	Reported
Gold	1. Fleet Telemetrics Program: Through the use of Global Positioning Systems (GPS) technology and integrated software management and reporting, the application of fleet telemetrics to management of the city's fleet has the greatest potential to reduce fleet GHG emissions in the short term. Implementation of Fleet telemetrics began in 2009, and preliminary phases of deployment have shown reductions in fleet fuel usage of up to 25%. Long-term estimates of full implementation of the program by 2020 are expected to result in a net reduction of 10% fuel usage through this program alone.	5-2014
	2. Fleet Fuel Efficiency Improvement: As part of the city's Sustainable Fleet Policy (API# 57), the City continues to improve fleet vehicle efficiency as part of the City's ongoing replacement program. Vehicle purchases are based upon established vehicle standards that emphasize the greatest fuel economy and lowest emissions each vehicle's respective class. The vehicle classification is assigned based on the actual type of use and need of a particular position.	





















Level	Efficient Transportation Activities	Reported
Platinum	1. Bikeway Master Plan and Pedestrian Master Plan: Implementation of the City's bikeway master plan, which was originally adopted in the 1990s but has been updated as recently as 2010, has resulted in the implementation of numerous on-street bike lanes and signage, off-street bikeways, and improved connectivity throughout the city. The Pedestrian Master Plan was adopted in 2006 and identifies numerous opportunities to improve pedestrian connectivity and safety.	5-2014
	2. Complete Streets Policies & Program: Consistent with policies in the 2030 General Plan and the Bikeway and Pedestrian Master Plans, the city has implemented a number of recent "complete streets" projects that ensure safe access for all users, modes, ages, and abilities. Examples include new bike/pedestrian bridges, safe routes to school improvements, pilot "green streets," streetscaping projects in numerous business districts & corridors, etc.	
	3. Zipcar Carsharing Program: In 2011, the City worked with Zipcar to start a 10-car program in the downtown Sacramento area. In late 2011, Zipcar expanded to add two cars to the Sac State University campus.	

























Land Use and Community Design Activity

Level	Land Use and Community Activity	Reported
Silver	1. 2030 General Plan: The Plan provides numerous smart growth oriented goals, policies and programs to increase compact, mixed use development through increased densities, transit-orientation, removal of regulatory barriers to infill (e.g. excessive parking requirements). The Plan utilizes land use and urban districts that focus on harmonization of land use and urban design, rather than a sole focus on land use and density, to achieve the plan's major focus on smart growth and sustainable community development.	5-2014

Level	Land Use and Community Activities	Reported
Gold	1. Pre-Approved Infill House Plans: The City of Sacramento Infill House Plan Program was developed to streamline the process for development of high quality single family homes in the city's older neighborhoods and redevelopment areas. The homes were designed to suit the character and style of the city's older neighborhoods. Under this program, users can purchase plans that are pre-approved through the city's design review and building plan check review process, saving time and money.	5-2014
	2. Green Development Code Update: The 2030 General Plan (General Plan) establishes land use policies based on sustainable practices, such as infill and green development. The land use policies of the General Plan, however, cannot promote changing long-entrenched development patterns when paired with outdated zoning and development regulations. A key implementation measure of the General Plan is to comprehensively update the zoning code. The "Green Development Code", which kicked off in 2011, will result in a user-friendly document that provides predictable, clear and consolidated direction for development, and promotes sustainable development.	





















Level	Land Use and Community Activities	Reported
Platinum	1. Railyards Specific Plan: The Railyards is a collaborative planning effort between the City of Sacramento and Inland American Sacramento Holdings. The 244-acre brownfield site is located just north of Sacramento's central business district and east of the Sacramento River. It is recognized as the largest urban infill site in this region and presents Sacramento with a significant opportunity to accommodate future growth utilizing sustainable and smart growth principles. The city council approved Railyards project by unanimous vote on December 11, 2007.	er. s th
	2. Northeast Line Implantation Plan: Adopted on March 15, 2011, the Northeast Line Implantation Plan is a collection of actions to promote redevelopment of the light rail corridor that includes the Globe, Arden/Del Paso and Royal Oaks Stations. The primary goal is to facilitate a mix of housing and other community serving uses that include retail, office, and other civic and community uses.	
	3. Neighborhood Traffic Management Program (Traffic Calming): The City of Sacramento's Department of Transportation addresses neighborhood traffic concerns through a community-based program, the Neighborhood Traffic Management Program (NTMP). To improve neighborhood livability, this comprehensive process provides neighbors with resources to reduce speeding, reduce traffic volumes, and address other traffic-related issues. The NTMP focuses on residential streets. The goal is to calm traffic on these local streets, allowing children and families to feel more secure in their own neighborhoods.	

























Open Space and Offsetting Carbon Emission Activity

Level	Open Space Offsetting Carbon Emission Activities	Reported
Silver	1. The Urban Forest Services division of the City Department of Transportation provides tree care service for the City's public trees. Public trees include street trees (tree within planter strips or the area between the sidewalk and the curb), trees in city parks, and trees on city property. Urban Forestry Service, under the authority of the Sacramento City Code, also protects heritage trees on both public and private property. The UFS staff have completed a tree inventory, and are working on a management plan, including a "stratum analysis" to provide an assessment of costs and benefits associated with the city's urban forest.	5-2014
Level	Open Space Offsetting Carbon Emission Activities	Reported
Gold	1. Tree Planting: Urban Forestry Services, working with city departments, will plant roughly 2,200 trees per year above replacement value, both on city streets as well as in parks and open spaces or on other city-owned property. UFS also partners with the Sacramento Tree Foundation on various initiatives to preserve and expand the urban forest on private property.	5-2014
	 2030 General Plan - Infill Strategy: By focusing most of the planned growth through 2030 in target infill opportunity areas within the city limits, the 2030 General Plan helps in the preservation of open space, habitat and agriculture preservation. 	
Level	Open Space Offsetting Carbon Emission Activities	Reported
Platinum	Natomas Basin Habitat Conservation Plan (HCP) / Natomas Basin Conservancy: The city worked with stakeholders and regulatory agencies to create an HCP in 2003, and set up a conservation group known as the Natomas Basin Conservancy, to help manage habitat in the Plan area.	5-2014
	2. Greenergy and Carbon Offset Purchases for City Facilities: The city purchases both carbon offsets and Greenergy for a number of its operations. Based on existing contracts paid since 2005 and ongoing efforts, the Phase 1 Climate Action Plan estimated that over 750,000 kWh worth of Greenergy is purchased from SMUD annually. Additionally, the Sacramento Zoo purchases offsets to cover 100% of its GHG emissions.	
	3. Community Gardens: The city has 12 community gardens operating. Having residents grow their own food reduces the number of trips to shopping centers and creates a small sink for greenhouse gases.	



















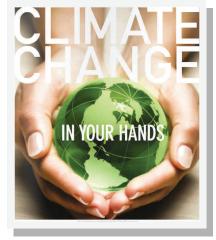




Promoting Community and Individual Action Activity

Level	Promoting Community and Individual Action Activities	Reported
Silver	1. CoolCalifornia Challenge: The city is participating in this statewide pilot program which challenges cities to engage residents and households to take action to reduce household energy and vehicle travel. Participants earn points for their communities, and are eligible for raffle and other prizes during the course of the competition. The city is partnering with a local climate advocacy group (350 Sacramento) and Greenwise Joint Venture and key sponsorships from PG&E and SMUD.	5-2014

Level	Promoting Community and Individual Action Activities	Reported
Gold	1. "Climate Change: In Your Hands" (Sacramento News & Review, March 2012 supplement): The city ran a paid 8-page supplement that highlights ways that individuals can take action in their own lives to reduce their carbon footprint. The SN&R is read by 75,000 readers weekly in the Sacramento region. The city also obtain 5,000 overruns as part of the contract to use at outreach events.	5-2014
	 Sacramento Area Climate Partnership: In 2008, SMUD began hosting an interagency working group attended by Sacramento County, the Sac Metro Air Quality Management District and the six incorporated cities in the counties to initiate a regional GHG inventory. The inventory was completed in 2009 and was utilized in the city's CAP. The partnership continues to meet quarterly to share information, ideas, and CAP implementation opportunities. 	



Climate Change: In Your Hands













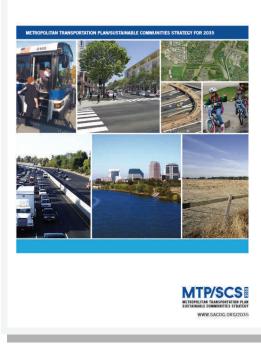


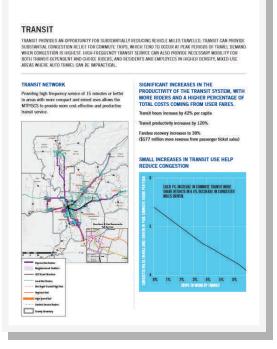






Level	Promoting Community and Individual Action Activities	Reported
Platinum	1. Greenwise Regional Action Plan: In 2010, Mayor Kevin Johnson convened community leaders, business interested and individual throughout the region to participate in a regional planning effort to create a regional sustainability plan. The formation of the plan spawned Greenwise Joint Venture, a nonprofit organization, to help carry out the plans objectives and specific actions.	5-2014
	2. Sacramento Area Council of Governments (SACOG) 2035 Metropolitan Transportation Plan Update and Sustainable Communities Strategy: In April 2012, SACOG adopted the 2035 MTP and SCS, in compliance with SB 375. The MTP/SCS improves on past efforts with the Blueprint and the prior MTP to invest our funding wisely, reduce time spent in congestion, reduce greenhouse gas emissions, and increase the number of residents with access to transit. The city's 2030 General Plan, adopted in 2009, was already consistent with the Blueprint, and the city's new CAP sets forth performance targets that are aligned with the Metropolitan Transportation Plan/Sustainable Community Strategy.	
	3. Outreach for the Sacramento Climate Action Plan, which was adopted on February 14, 2012, included the following: An initial public meeting to gather ideas and input on the Sacramento community could reduce its collective greenhouse gas emissions; a series of meetings with special interest groups such as the building industry, Environmental Council of Sacramento, 350 Sacramento; equity and affordable housing advocates and a presentation and discussion at the Sacramento Sustainability Forum. Finally, a public meeting was held on the final draft Climate Action Plan prior to public hearings at the planning commission and city council.	



























Promoting Good Government at the Local Level

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