

2017 BEACON AWARD WINNER

BEACON



SPOTLIGHT  
AWARD

WINNER

BEST PRACTICE  
ACTIVITIES



# City of Palo Alto

Sustainability Best Practices Activities



**ILG** INSTITUTE FOR  
LOCAL GOVERNMENT<sup>SM</sup>  
*Promoting Good Government at the Local Level*

## 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 Program: Local Leadership toward Solving Climate Change. The Beacon Program 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 Program 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.



## Supporting California local governments

The Beacon Program is funded by California utility customers 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.



## SPOTLIGHT AWARD

Areas of Accomplishment

	SILVER LEVEL	GOLD LEVEL	PLATINUM LEVEL
Agency GHG Reductions			53%
Community GHG Reductions			21%
Agency Energy Savings			21%
Natural Gas Savings			35%
Sustainability Best Practice Activities			2017
Beacon Award			2017



## City of Palo Alto

### Best Practice Activities

[www.ca-ilg.org/BeaconAward/](http://www.ca-ilg.org/BeaconAward/)

# Energy Efficiency and Conservation Activity

Level	Energy Efficiency and Conservation Activity	Reported
Silver	1. The City of Palo Alto's consultant, Alternative Resources, Inc., has finalized a feasibility study for a potential energy/compost facility adjacent to the city's wastewater treatment plant to convert organic materials to energy and compost.	2015

Level	Energy Efficiency and Conservation Activities	Reported
Gold	<ol style="list-style-type: none"> <li>1. A new HVAC Energy Management Control System has been installed in Palo Alto City Hall to optimize all of the mechanical systems to provide greater energy efficiency.</li> <li>2. The city has decided to use a reasonable carbon adder to calculate cost-effectiveness of gas usage in the city so that the environmental aspect of efficiency is valued appropriately.</li> </ol>	2015

Level	Energy Efficiency & Conservation Activities	Reported
Platinum	<ol style="list-style-type: none"> <li>1. The city optimized the control system that regulates carbon monoxide in the city hall parking garage with new high efficiency motors.</li> <li>2. Various stakeholders worked with the Palo Alto Unified School District in developing a program they call "Get SET" (Save Energy Today), which includes a protocol for shutting down appliances during school breaks, saving significant energy.</li> <li>3. Palo Alto issued an RFQ for the purchase of 600 LED streetlight fixtures (around 10% of the city's streetlights) in September 2010 and council approved a contract with Leotek for the purchase of the LED fixtures in November 2010.</li> </ol>	2015





# Water & Wastewater Systems Activity

Level	Water & Wastewater Systems Activity	Reported
Silver	1. Highly treated wastewater from the city's regional water quality control plant is increasingly being used for landscape irrigation, to save potable water supplies for human consumption and use.	2015

Level	Water & Wastewater Systems Activities	Reported
Gold	<ol style="list-style-type: none"> <li>The storm drain utility has offered a Stormwater Rebate Program to residents and businesses since 2008, providing financial incentives up to \$1,000 (residential)/\$10,000 (commercial) for measures that reduce stormwater runoff.</li> <li>The city is saving on average 1,881,494 gallons of water per year over state and national baselines because of Palo Alto's green building efforts.</li> </ol>	2015

Level	Water and Wastewater Systems Activities	Reported
Platinum	<ol style="list-style-type: none"> <li>To achieve water savings, Palo Alto Utilities has a program which would pay the Palo Alto Unified School Districts \$1.50/square foot up to \$30,000 for sod and irrigation materials on any conversion of lawn to drought-tolerant garden.</li> <li>The Mitchell Park Irrigation Project retrofitted the irrigation of a parking island at Mitchell Park from fixed non-uv resistant plastic risers to Rainbird 1800 series pop-ups. The previous system used approximately 125 gallons per minute versus the new system which is using approximately 43 gallons per minute (almost a 2/3 reduction).</li> <li>Launched a program in 2014 to divert construction dewatering flows (400gpm at one site alone) into city water trucks used for water street trees, etc.</li> </ol>	2015





# Green Building Activity

Level	Green Building Activity	Reported
<b>Silver</b>	1. 789 permit applications were covered by the green building program in 2010, an increase of 83% from 2009.	<b>2015</b>

Level	Green Building Activities	Reported
<b>Gold</b>	<ol style="list-style-type: none"> <li>240 green buildings have been completed or are under construction in the city.</li> <li>18,325 tons of construction and demolition debris were diverted from the landfill for reuse or recycling amongst 465 permits in 2010.</li> </ol>	<b>2015</b>

Level	Green Building Activities	Reported
<b>Platinum</b>	<ol style="list-style-type: none"> <li>The City of Palo Alto currently has 1,860,188 square feet of green building construction.</li> <li>Nine commercial renovation projects provided the city with Energy Star Portfolio Manager benchmarking reports providing valuable data on operational performance.</li> <li>Updated the city's green building ordinance in 2014, aiming to stay ~15% above new state standards.</li> </ol>	<b>2015</b>





# Waste Reduction and Recycling Activity

Level	Waste Reduction Activity	Reported
Silver	1. In 2015, the city completed a study looking at energy utilization from yard trimming and food scraps. The goal is to find cost effective technologies to recover energy and other resources from yard trimmings, food scraps and wastewater solids; and to determine whether new facilities should be located in Palo Alto, or elsewhere.	2015

Level	Waste Reduction Activities	Reported
Gold	<ol style="list-style-type: none"> <li>1. The average monthly tonnage of commercial compostables collected by GreenWaste increased by 30% in fiscal year 2011. As of January 2011, GreenWaste had collected and processed 6,382 tons of commercial compostables.</li> <li>2. Palo Alto restricted the use of single use plastic checkout bags at large supermarkets and expanded-polystyrene (foam) disposable food service containers at food service establishments.</li> </ol>	2015

Level	Waste Reduction Activities	Reported
Platinum	<ol style="list-style-type: none"> <li>1. Various stakeholders helped rollout a new program of recycling and composting at PAUSD schools, involving three bins, posters, demonstrations, bin monitors and other educational tools, achieving a 60% diversion rate and reducing the number of bins and pickups at every school.</li> <li>2. City staff partnered with GreenWaste to help Palo Alto Community Child Care (PACCC) improve recycling programs and implement composting in 19 facilities.</li> <li>3. As part of the city's Green Building Program all demolitions and projects greater than \$25,000 in valuation are required to divert debris from landfills.</li> </ol>	2015





# Climate-friendly Purchasing Activity

Level	Climate-Friendly Activity	Reported
<b>Silver</b>	1. The city has decided to require staff to pursue cost-effective “green” gas, when it can be purchased for the cost of “brown” gas plus an appropriate carbon adder.	<b>2015</b>

Level	Climate-Friendly Activities	Reported
<b>Gold</b>	<ol style="list-style-type: none"> <li>1. City green purchasing efforts in 2011 focused on reducing plastics from the purchasing supply chain.</li> <li>2. The city is a Bay Area leader in reducing the amount and toxicity of its pesticides used in parks, open spaces and city facilities. Since 2005, total ecotoxic pesticide use has fallen 89% which is significant because ecotoxicity reduction is the primary driver of the city’s Integrated Pest Management Policy and adopted bay-friendly landscaping principles.</li> </ol>	<b>2015</b>

Level	Climate-Friendly Activities	Reported
<b>Platinum</b>	<ol style="list-style-type: none"> <li>1. In 2010 the city saw the addition of bay friendly standards for landscape maintenance to parks maintenance contractors. Landscape maintenance features several requirements for Organic Materials Review Institute (OMRI) Certified organic fertilizers, increased mulching to reduce the need for weeds, and keeping leaf litter around trees and planters where appropriate to return nutrients to the soil in lieu of increasing the need for additional fertilizer.</li> <li>2. The city golf course contractor is now required to use trapping for gophers and ground squirrels and various other less-toxic approaches for golf course maintenance.</li> <li>3. The city’s office supply contract is being reviewed again with the intention of increasing recycled content and reduced toxicity of key office products that are most used.</li> </ol>	<b>2015</b>





# Renewable Energy and Low-Carbon Fuels Activity

Level	Renewable Energy and Low Carbon Fuels Activity	Reported
Silver	1. In May 2010, council approved new contracts for renewable energy supplies from two landfill gas-to-energy projects.	2015

Level	Renewable Energy and Low Carbon Fuels Activity	Reported
Gold	<ol style="list-style-type: none"> <li>The city is planning a pilot program to reduce electricity usage during high-demand periods in the summer. This “Demand Response” (DR) Program is intended to limit production from inefficient and polluting electric generation resources.</li> <li>Public works launched a pilot program to allow public access to CNG fuel at the city’s Municipal Services Center. Customers are allowed access to the Compressed Natural Gas (CNG) dispensers between 9:00 AM and 2:00 PM, Monday through Friday.</li> </ol>	2015

Level	Renewable Energy and Low Carbon Fuels Activity	Reported
Platinum	<ol style="list-style-type: none"> <li>Cubberley Community Center in South Palo Alto is home to a wide variety of recreational activities and is also the site of the largest of three city-funded solar projects. In 2008, a 117 kilowatt rooftop photovoltaic system was installed to generate electricity and protect classrooms from sun and rain.</li> <li>The city’s Municipal Service Center is home to a 75 kilowatt solar project notable because of its solar trackers, which follow the sun. This results in almost a 50% greater ability to capture solar energy than non-tracking projects nearby.</li> <li>The Palo Alto green renewable rate option is participated in by 21% of electric customers. The program participants collectively subscribed for 71,334 MWh of renewable energy credits (RECs) through the program in 2010; this generation is estimated to have displaced 38,775 tons of CO2 in 2010.</li> </ol>	2015





# Efficient Transportation Activity

Level	Efficient Transportation Activity	Reported
Silver	1. Palo Alto City Hall now has three electric vehicle charging stations.	2015

Level	Efficient Transportation Activities	Reported
Gold	<ol style="list-style-type: none"> <li>1. Bay Area Air Quality Management District (BAAQMD) and the California Energy Commission (CEC) have awarded the city \$36,000 and \$10,000 respectively to install chargers in various locations in Palo Alto. This project will be completed by the end of the year. Both projects will help staff determine the current demand for EV chargers and will help in planning for future installations.</li> <li>2. City staff worked with Stanford, ZipCar and the Sheraton to install two ZipCar spots in the Palo Alto Transit Center parking lot. Stanford already had a successful ZipCar program with more than 26 vehicles in 12 locations and they wanted to partner with the city to expand that network.</li> </ol>	2015

Level	Efficient Transportation Activities	Reported
Platinum	<ol style="list-style-type: none"> <li>1. The city along with the Valley Transportation Authority (VTA) and the Cities of San Jose and Mountain View have been working on a countywide public bicycle sharing program that would have consisted of 100 bicycles throughout the Santa Clara County.</li> <li>2. The city has an employee bike share program with approximately 40 bikes in various city facilities.</li> <li>3. In July 2010, the employee commute program was modified to enable benefits-eligible employees who use transit or ride in a vanpool to take full advantage of federal tax law. The city provides an equitable 25% subsidy for their qualified commute expenses, and the remainder is covered by pre-tax salary deductions up to the federal monthly maximum of \$230.</li> </ol>	2015





# Land Use and Community Design Activity

Level	Land Use and Community Activity	Reported
Silver	1. The existing Comprehensive Plan contains economic, equity and environmental policies that support the city's sustainability goals.	2015

Level	Land Use and Community Activities	Reported
Gold	<ol style="list-style-type: none"> <li>The council passed a mandatory Green Building Ordinance to the Palo Alto Municipal Code which requires specific project types to meet minimum thresholds of compliance, and verification using the appropriate USGBC LEED or Build It Green (BIG) Green Point Rated (GPR) green building rating systems.</li> <li>The council passed an ordinance establishing local energy efficiency standards based on the 2005 California Energy Code. The ordinance required primarily new construction projects to exceed Title 24, Part 6 of the California Energy Code by 15%.</li> </ol>	2015

Level	Land Use and Community Activities	Reported
Platinum	<ol style="list-style-type: none"> <li>Council has supported mixed-use and higher density residential uses near transit service to encourage residents and workers to use non-vehicular means of transportation (walking, bicycling, transit), particularly in lieu of commuting by single-occupant vehicles.</li> <li>The council has made zoning ordinance amendments that facilitate mixed use on commercially-zoned parcels and allow for small retail services in residential projects which facilitates walking or bicycling to and from retail services one might otherwise have to drive to.</li> <li>The city adopted a pedestrian and transit oriented development zoning district in the vicinity of the California Avenue Caltrain Station.</li> </ol>	2015





# Open Space and Offsetting Carbon Emission Activity

Level	Open Space Offsetting Carbon Emission Activities	Reported
<b>Silver</b>	1. Council approved a Climate Protection Plan (CPP) that set short, medium, and long term goals to reduce municipal operations and community greenhouse gas (GHG) emissions.	<b>2015</b>

Level	Open Space Offsetting Carbon Emission Activities	Reported
<b>Gold</b>	1. In April 2010 council set an ambitious target of reducing municipal emissions by 20% below the 2005 baseline by 2012.  2. The Urban Forest Master Plan is an important component of the city's sustainable development efforts including CO2 reduction.	<b>2015</b>

Level	Open Space Offsetting Carbon Emission Activities	Reported
<b>Platinum</b>	1. Another 46 acres of closed landfill will be added to the 29 acres already open to the public at Byxbee Park this summer. Another 51 acres will be added to this park in 2013 after final closure of the last active landfill section for a combined 126 acres of pastoral park.  2. The city currently has a community garden program that allows residents to grow and harvest his or her own locally grown vegetables, flowers and herbs. (see <a href="http://www.cityofpaloalto.org/gov/depts/csd/parks/gardens.asp">http://www.cityofpaloalto.org/gov/depts/csd/parks/gardens.asp</a> )	<b>2015</b>



Community Gardens of Palo Alto





# Promoting Community and Individual Action Activity

Level	Promoting Community and Individual Action Activities	Reported
Silver	1. The city helped create the Community Environmental Action Partnership (CEAP), a collaborative citywide initiative that engages the various segments of the community to identify opportunities to create and implement sustainable environmental solutions.	2015

Level	Promoting Community and Individual Action Activities	Reported
Gold	<ol style="list-style-type: none"> <li>Staff from the city's Zero Waste Program hired the nonprofit Strategic Energy Initiatives (SEI) to help parents and students form and sustain Green Teams at public and private schools in the community.</li> <li>The City of Palo Alto is currently exploring basic and enhanced bicycle way finding signage to help inform users of important destinations, facilitate route selection, and brand the core bicycle transportation system.</li> </ol>	2015

Level	Promoting Community and Individual Action Activities	Reported
Platinum	<ol style="list-style-type: none"> <li>The city offers a tax-free \$20 incentive for regular bike commuters, in the form of a voucher that can be used at any bike store for repairs, maintenance and equipment related to their bike commute.</li> <li>The city has moved to develop and sustain a model Safe Routes to School program in an effort to attract the interested but concerned demographic of bikers.</li> <li>The City of Palo Alto is currently in the process of finalizing its draft Bicycle + Pedestrian Transportation Plan (BPTP 2011 see <a href="http://www.cityofpaloalto.org/civicax/filebank/documents/31928">http://www.cityofpaloalto.org/civicax/filebank/documents/31928</a>) to guide public and private investments in the city's non-motorized transportation facilities and related programs, and to comply with state eligibility requirements for Bicycle Transportation Account (BTA) funds</li> </ol>	2015





# City of Palo Alto Bicycle + Pedestrian Transportation Plan

Adopted July 2012

PREPARED BY:  
Alta Planning + Design

PREPARED FOR:  
City of Palo Alto



Notes:





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