



City of Riverside

Sustainability Best Practices Activities



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 the climate change and sustainability recognition program, the Beacon Program. 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 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.



SPOTLIGHT AWARD Areas of Accomplishment		SILVER LEVEL	GOLD LEVEL	PLATINUM LEVEL
	Agency GHG Reductions			
	Community GHG Reductions			
	Agency Energy Savings			
	Natural Gas Savings			
	Sustainability Best Practice Activities		2013	



Energy Efficiency and Conservation Activity

Level	Energy Efficiency and Conservation Activity	Reported
Silver	1. One of the City of Riverside's most innovative green programs, the <u>Whole House Rebate program</u> , was established in 2010 and recognized by Department of Energy Secretary, Steven Chu. The city already offered rebates for a variety of energy and water efficiency upgrades including weatherization, tree planting, solar installations, purchasing of high-efficiency Energy Star rated appliances and equipment, and cultivation of a water wise landscape. Completing these upgrades can still be costly, however; in order to further incentivize Riverside residents to operate more sustainably, the city developed the Whole House Rebate program. Initially funded through American Recovery and Reinvestment Act funds, the program uses a point system to determine the level of rebate to be distributed; a customer who scores over 10 points in a single upgrade process, for example, will have their total rebates multiplied by 200%. More than 500 Whole House rebates have been issued in total with 248 issued in 2010 alone, putting \$1.6 million back into the community and saving over 530,000 kilowatt hours of energy. The Whole House program has also incentivized several new companies to relocate to Riverside, including REEis, a company which provides comprehensive home energy audits and retrofits. Through offering programs such as Whole House, Riverside has been able to draw skilled labor, add new local business and increase staffing to existing local companies.	2012

Level	Energy Efficiency and Conservation Activities	Reported
Gold	2. Even with substantial rebate programs in place, some businesses and residents would experience financial hardship in trying to become more sustainable. Riverside offers several low-interest financing programs to help customers avoid the high up-front costs sometimes associated with sustainability projects. As a member of the Western Riverside Council of Governments, the City of Riverside is part of <u>the largest AB-811 program in the nation</u> , providing loans to residential, commercial or industrial property owners for energy and water conservation projects.	2012



Energy Efficiency and Conservation Activity

Level	Energy Efficiency and Conservation Activities	Reported
Gold	3. A new leveraged partnership with the Southern California Gas Company even provides free energy upgrades to low-income individuals with the Energy Savings Assistance Program (ESAP). Residents already receiving some types of government assistance such as Medi-Cal, Medicaid or Social Security Income, as well as those whose total income falls below the poverty line, are eligible to receive free attic insulation, weather stripping, low-flow showerheads, water heater blankets, high-efficiency washing machines, furnace repair or replacement, AC tune-up, torchiere replacements, and CFL's as well as energy education. Together these programs provide a means of creating affordable improvements and access to a range of services, allowing residents to complete simple improvements or full overhauls.	2015

Level	Energy Efficiency & Conservation Activities	Reported
Platinum	4. Introduced in 2010, Riverside Public Utilities' award-winning <u>Environmental and Economic Effectiveness Effort (E4) Plan</u> fosters Riverside's economic development by stabilizing utility rates, offering discounted economic development and business retention electric rates to large customers, encouraging expanded use of renewable energy technologies, and offering aggressive business incentives and energy efficiency programs. As part of E4, Riverside's various commercial rebate incentives offer free audits and monetary rewards for improving energy and water efficiency as well as installing photovoltaic systems on commercial structures. Reducing expenses from utility costs allows local business to invest more in the local economy and create new jobs.	2015





Water & Wastewater Systems Activity

Level	Water & Wastewater Systems Activity	Reported
Silver	1. In order to decrease unnecessary water use, Riverside partnered with Riverside-based business in 2010 to implement one of its most successful programs. Riverside Public Utilities' award-winning water conservation program <u>"FreeSprinklerNozzles.com"</u> encouraged customers to participate in a brief online water reduction lesson in order to receive up to 25 free residential or 100 free commercial sprinkler nozzles. The Precision-Series Nozzles can reduce water consumption by 20% for each replaced sprinkler head without adjusting run times or sprinkler controllers. This public-private partnership resulted in the distribution of 150,000 high- efficiency sprinklers and saved 850 million gallons of water.	2015
Level	Water & Wastewater Systems Activities	Reported
Gold	2. Riverside's semi-arid climate, unpredictable rainfall and growing population have made water management an increasingly complex challenge in recent years; however, due to the city's proactive leadership, today Riverside can proudly be called "water independent", effectively reducing the cost of water for city residents as well as the energy and GHG emissions associated with transporting water from out of the area. Riverside's Water Supply Plan looks to increase local water supplies through:	2015
	 Diversification of our water supply portfolio, including fully developing area groundwater basins and improve their management. 	
	 Increase the use of recycled water by creating sources of direct delivery to offset potable (drinkable) supplies and recharge area groundwater basins. 	
	 Develop area surface water supplies, such as those at the Seven Oaks Dam and Mockingbird Canyon Dam, and the use of a rubber diversion dam along the Santa Ana River. 	
	3. Adopted Water Use Efficiency Master Plan.	





Water & Wastewater Systems Activity

Level	Water and Wastewater Systems Activities	Reported
Platinum	4. Adopted <u>Water Conservation Ordinance</u> which outlines unreasonable uses of water and four stages of activities to be implemented based upon current water conditions.	2012
	5. Adopted <u>Water Recycling Master Plan</u> . Phase One of the city's Recycled Water Plan is anticipated to connect ten local schools and parks to connect into the recycled water system, saving 8,600 acre feet of water per year, enough to supply 17,000 homes.	
	 Adopted <u>Water Efficient Landscape Ordinance</u> exceeding state requirements. 	





Green Building Activity

Level	Green Building Activity	Reported
Silver	 One of the city's <u>major sports parks reduced its water needs</u> through the installation of artificial turf, while several waterwise median landscape demonstration projects have been deployed across the city, including one at the Public Utilities Operation Center and another at a large local business. 	2012
Level	Green Building Activities	Reported
Gold	 In 2007, Riverside began its <u>Green Builder Program (RGB)</u> - the first, and now the largest, in California. This voluntary program provides builders with an incentive to tap into the green building market while offering potential homeowners a chance to purchase eco-friendly living space. RGB allows builders to differentiate themselves through certification as a Green Builder, which may be obtained by meeting several criteria. Green Builders must satisfy strict energy and water efficiency requirements, recycle at least 50% of construction waste and 100% of the wood used in the home must be certified sustainable forest products. 4,600 Green Building certified homes are currently planned or in some stage of development across the city and are each equipped to provide 650 kWh per year in energy savings as well as 20,000 gallons in reduced water usage. 	2012
Level	Green Building Activity	Reported
Platinum	4. Riverside is revitalizing foreclosed homes with energy efficiency measures and solar systems. The program takes distressed properties and makes them energy efficient based on a home energy rating system (HERS), providing significant rebate funding for each house that will serve as down payment assistance. Homeowners will have the option to install a PV system and finance the cost into their home loan through the bank financing.	2012





Waste Reduction and Recycling Activity

Level	Waste Reduction Activity	Reported
Silver	 In 2007, Riverside exceeded the State's target waste diversion rate, and the city is well on its way to achieving its own goal of reducing waste by 75% before 2020. Riverside's waste reduction and recycling programs have allowed the city to divert 69% of its waste from landfills as of 2010. 	2012

Level	Waste Reduction Activities	Reported
Gold	 The city's Cleaning Up Riverside's Environment (CURE) program, which provides bulky item pickup as well as hazardous and electronic waste removal, has collected over 13,000 tons of hard-to-dispose-of waste since 2003. CURE's educational programs have also led to an increase in recycling and backyard composting. The city helps curb plastic and paper grocery bag waste through the distribution of over 120,000 reusable green bags since 2007. 	2012





Climate-friendly Purchasing Activity

Level	Climate-Friendly Activity	Reported
Silver	1. In March 2009, the city adopted an <u>Environmentally Preferable Purchasing</u> (EPP) policy.	2012

Level	Climate-Friendly Activities	Reported
Gold	2. The city requires that products purchased meet criteria specified in the <u>EPA's Environmentally Preferable Purchasing database</u> .	2012
	3. The city gives preference to vendors who meet at least 3 of the following characteristics: Riverside produced products and services, alternative energy source, bio-based, biodegradable, compostable, high recycled content, low toxicity, low volatile organic compound (VOC), pollution reduction, recyclable, repairable, resource efficient, or reusable.	

Level	Climate-Friendly Activities	Reported
Platinum	4. The city's purchasing division works with suppliers and vendors to inform them about the EPP policy and help them meet its criteria.	2012
	5. The purchasing division orders in appropriate quantities whenever practice and cost effective to avoid obsolete products.	
	 The purchasing division and city departments promote environmentally preferable products in its purchase of office products through "green" catalogs. 	





Renewable Energy and Low-Carbon Fuels Activity

Level	Renewable Energy and Low Carbon Fuels Activity	Reported
Silver	1. Riverside has created a <u>Green Map</u> which displays where all solar projects within the city are located.	2015

Level	Renewable Energy and Low Carbon Fuels Activity	Reported
Gold	 In 2005, Riverside began its award-winning <u>Grease to Gas to Power</u> <u>project</u> through which the city began collecting grease wastewater from restaurants to feed into the anaerobic digestion process. The project generates about 1.6 megawatts per day, enough electrical power in one day to provide the electrical needs of 1,203 homes for one month in Riverside. The project's effects on the sewer system were equally favorable; sanitary sewer overflows caused by restaurant grease blockages were reduced from 30% of all calls to less than 1%. One of the main goals of the project was to reduce dependence on natural gas, which it has done successfully; natural gas requirements have decreased by 80% at the facility. The energy cost savings generated by this project save the city almost \$1 million per year. Riverside is working to raise photovoltaic incentives from \$3.00 to \$4.00 dollars a watt. While there is widely considered to be a slight decrease in cost of PV systems, this reduction has not yet been realized in the city due to a number of factors. In order to generate green jobs and facilitate the expansion of the photovoltaic market, we would like to further incentivize people to go solar. 	2015





Renewable Energy and Low-Carbon Fuels Activity

Level		Renewable Energy and Low Carbon Fuels Activity	Reported
Level Platinum	4.5.6.	In 2011, the city entered into a public-private partnership which led to the construction of the city's <u>award-winning in-pipe hydropower system</u> . This partnership gained the city substantial notoriety including the Outstanding Management in Energy Award from the American Water Works Association (AWWA). In only seven months, the system generated over 23 MW of clean, renewable, low-cost energy from rotating turbines inside the city's water pipes, with no impact on water operations. Now in its third generation of development, the efficiency of the project has tripled, allowing it to be more easily and fruitfully replicated by other cities wishing to diversify their energy portfolio. The <u>Tequesquite Landfill Solar Project</u> is in development and will also add between 5 MW and 10 MW of solar energy to Riverside's renewable energy portfolio while creatively utilizing former landfill space. Under California's Renewables Portfolio Standard (RPS), utilities and electric service providers are now required to increase total procurement from eligible renewable energy resources to 33% by 2020. As of 2010, 20% of the Riverside's power was being generated from renewable sources and 36% of power sources were non-greenhouse gas emitting,	Reported 2015
		putting Riverside well on its way to exceeding the RPS objectives. To meet this goal, the city aims to install at least 20MW of solar by 2020 through the offering of residential and commercial incentives and financing mechanisms. To date, total commercial and residential solar energy being produced in the city is already over 4.5MW with 401 projects completed to date.	





Efficient Transportation Activity

Level	Efficient Transportation Activity	Reported
Silver	 Riverside opened the <u>first hydrogen fueling station</u> in the Inland Empire in 2006. 	2015

Level	Efficient Transportation Activities	Reported
Gold	 The city installed seven electric vehicle charging stations for city and public use. The city's fleet includes five hydrogen-powered, zero-emission Priuses. 87% of Riverside's non-emergency fleet is powered by alternative energy. 	2015

Level	Efficient Transportation Activities	Reported
Platinum		2015





Land Use and Community Design Activity

Level	Land Use and Community Activity	Reported
Silver		2015

Level	Land Use and Community Activities	Reported
Gold		2015
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Level	Land Use and Community Activities	Reported
Platinum		2015





Open Space and Offsetting Carbon Emission Activity

Level	Open Space Offsetting Carbon Emission Activities	Reported
Silver		2015

Level	Open Space Offsetting Carbon Emission Activities	Reported
Gold		2015

Level	Open Space Offsetting Carbon Emission Activities	Reported
Platinum		2015





Promoting Community and Individual Action Activity

Level	Promoting Community and Individual Action Activities	Reported
Silver		2015

Level	Promoting Community and Individual Action Activities	Reported
Gold		2015

Level	Promoting Community and Individual Action Activities	Reported
Platinum		2015







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