PROUD PARTICIPANT



Local Leadership Toward Solving Climate Change

City of Riverside

Beacon Award Accomplishments to Date and Best Practice Activities

Accomplishments to Date

(As of 5/1/12)

CRITERIA	AWARD LEVELS		
	SILVER	GOLD	PLATINUM
Agency Facilities			
GHG Reductions	-	-	-
Electricity Savings	-	-	-
Natural Gas Savings	-	-	-
Community			
GHG Reductions	-	-	-
Activity Promoting Energy Efficiency	-	-	-
Best Practice Areas			
Completed Activities in Each Area	1	3	-

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 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.



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1. Energy Efficiency & Conservation

Level	Completed Activities	Reported
Silver	1. One of the City of Riverside's most innovative green programs, the <u>Whole House Rebate</u> program, 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 waterwise landscape.	03-2012
	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.	



Gold	 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</u> <u>the nation</u>, providing loans to residential, commercial or industrial property owners for energy and water conservation projects. 	03-2012
	2. 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.	03-2012
Platinum	 Introduced in 2010, Riverside Public Utilities' award- winning Environmental and Economic Effectiveness Effort (E4) Plan 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 	03-2012

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	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.	
2.	TBD	
3.	TBD	



2. Water & Wastewater Systems

Level	Completed Activities	Reported
Silver	 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. 	03-2012
Gold	 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: 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 	03-2012



	-	olving Climate Change
	 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. 	
	Read more about Riverside's Water Supply Plan and projects which allow water independence to be possible.	
	2. Adopted Water Use Efficiency Master Plan.	
Platinum	 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. 	03-2012 03-2012
	2. 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.	03-2012
	3. Adopted <u>Water Efficient Landscape Ordinance</u> exceeding state requirements.	



3. Green Building

Level	Completed Activities	Reported
Silver	1. One of the city's <u>major sports parks reduced its</u> <u>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.	03-2012
Gold	1. In 2007, Riverside began its <u>Green Builder Program</u> (RGB) - 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.	03-2012
	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.	
	 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 	03-2012



	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.	
Platinum	1. TBD	
	2. TBD	
	3. TBD	



4. Waste Reduction & Recycling

Level	Completed Activities	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. 	03-2012
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. 	03-2012
	2. The city helps curb plastic and paper grocery bag waste through the <u>distribution of over 120,000</u> reusable green bags since 2007.	03-2012
Platinum	1. TBD	
	2. TBD	
	3. TBD	



5. Climate-Friendly Purchasing

Level	Completed Activities	Reported
Silver	2. In March 2009, the city adopted an Environmentally Preferable Purchasing (EPP) policy.	03-2012
Gold	 The city requires that products purchased meet criteria specified in the <u>EPA's Environmentally</u> <u>Preferable Purchasing database</u>. 	04-2012
	 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. 	04-2012
Platinum	 The city's purchasing division works with suppliers and vendors to inform them about the EPP policy and help them meet its criteria. 	04-2012
	 The purchasing division orders in appropriate quantities whenever practice and cost effective to avoid obsolete products. 	04-2012
	 The purchasing division and city departments promote environmentally preferable products in its purchase of office products through "green" catalogs. 	04-2012



6. Renewable Energy & Low-Carbon Fuels

Level	Completed Activities	Reported
Silver	 Riverside has created a <u>Green Map</u> which displays where all solar projects within the city are located. 	03-2012
Gold	1. In 2005, Riverside began its award-winning Grease to Gas to Power project 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.	03-2012
	2. 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.	03-2012
Platinum	 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>. 	03-2012



	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.	
2.	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.	03-2012
3.	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, 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.	03-2012



7. Efficient Transportation

Level	Completed Activities	Reported
Silver	 Riverside opened the <u>first hydrogen fueling station</u> in the Inland Empire in 2006. 	03-2012
Gold	 The city installed seven electric vehicle charging stations for city and public use. 	03-2012
	 The city's fleet includes five hydrogen-powered, zero-emission Priuses. 87% of Riverside's non- emergency fleet is powered by alternative energy. 	03-2012
Platinum	 The city now provides residents and businesses financial <u>incentives</u> of up to \$2,000 for the purchase of electric vehicles. 	03-2012
	2. The city has <u>synchronized traffic signals</u> in the downtown area to streamline traffic, reducing congestion and therefore, GHG emissions.	03-2012
	3. TBD	



8. Land Use & Community Design

Level	Completed Activities	Reported
Silver	 Riverside has completed three new overpasses and one new underpass (e.g. <u>Van Buren/91</u> <u>Overpass</u> & <u>Iowa Avenue Grade Separation</u>) in an effort to improve air quality by reducing GHG emissions vehicle idling. Each structure was built with sustainability in mind, complete with both bike lanes and sidewalks for pedestrian. 	03-2012
Gold	 A total of 115 miles of bike lanes have been completed citywide, with a <u>Bicycle Master Plan</u> now being implemented to increase cycling as a means of transportation and recreation. 	03-2012
	 Public transportation has also become a more viable option through the city's "Go Transit" program, which offers up to a 30% discount for residents, subsidies for senior citizens, and free passes to city employees and students who take the bus. Over one million students took the bus in the first two years alone. 	03-2012
Platinum	1. TBD	
	2. TBD	
	3. TBD	



9. Open Space & Offsetting Carbon Emissions

Level	Completed Activities	Reported
Silver	1. In 2001, the city launched its <u>Tree Power Program</u> and <u>Campaign</u> , aiming to increase Riverside's urban forest and energy efficiency by offering free shade trees to residents. This program is still ongoing today, with the city offering one free shade tree per year to residents as well as \$25 rebates for the purchase of up to five more. To qualify, customers must plant the trees within 10-35 feet of their home or business. Well-placed trees around a structure can reduce air conditioning and cooling costs by as much as 20 percent.	03-2012
	Riverside's Tree Power program results in over \$500,000 of direct economic investment into local nurseries, not to mention a potential increase in sales as residents visit the nurseries to purchase their trees. Riverside has planted over 13,000 trees in each of the past three years, with more than 110,000 trees planted in total over the past decade. The Tree Power Program is estimated to save more than 16.2 million kilowatt hours of electricity and offset more than 20.2 million pounds of greenhouse gas emissions annually.	
Gold	 Riverside maintains <u>a park system</u> consisting of 51 parks totaling 2,500 acres, with the 1,800 acre Sycamore Canyon Wilderness Park providing substantial open space for hiking and biking. 	03-2012
	2. Riverside is <u>planning to increase open space by</u> <u>another 200 acres before 2015</u> , moving the city toward its goal of providing 90% of residents with access to park, recreation or open space within a half mile of their residence. The city is also aiming to	03-2012



	increase passive recreation and multi-use trails by 75% before 2015, coordinating trail connections with the county when possible.	
Platinum	1. TBD	
	2. TBD	
	3. TBD	



10. Promoting Community & Individual Action

Level	Completed Activities	Reported
Silver	 Riverside developed its first <u>Green Action Plan</u> (<u>GAP</u>) in 2007, which compelled both the city and its residents to improve air quality, reduce traffic congestion, increase access to and use of parks and open space, and allow Riverside to flourish as an urban and diverse community of art, culture and innovation. The 38 objectives of this Plan were quickly accomplished. In 2009, the GAP was revised, setting new and ambitious goals and objectives, aligned under eight major sections including: energy, greenhouse gas emissions, waste, urban design, urban nature, transportation, water and healthy communities. Today, Riverside's achievements under the GAP have established the city as a leader in clean and green living, as exhibited by its designation as California's first Emerald City by the State Department of Conservation. 	03-2012
Gold	 Riverside works to engage community members from all of its diverse community groups in order to ensure that the needs of residents and organizations are met with city policies and programs. In order to effectively implement the Green Action Plan and monitor its progress throughout the city, the <u>Green Accountability</u> <u>Performance (GAP) Committee</u> was formed in 2007. This group of 40 dedicated volunteers consists of individuals from the public, business, and education sectors who work to ensure that sustainable practices are being adopted throughout the city and the Green Action Plan is being implemented. 	03-2012



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	2. In order to educate and engage the community, Riverside launched the weekly <u>"Green Power</u> <u>Report"</u> radio show and <u>GreenRiverside.com</u> website in 2007. Both award-winning media outlets provide Riverside residents with updates on city efforts to improve sustainability as well as information about simple ways to "go green", upcoming green events, and Riverside's myriad incentive programs. The city also maintains a Twitter account, Facebook page and YouTube channel which provide updates on city events, sustainability measures and projects throughout Riverside and opportunities to get involved.	03-2012
Platinum	 In order to get Riverside's younger generation involved in conservation efforts, the city is implementing an award-winning classroom education program that integrates lessons about electricity, water and going green into classroom curriculum. 	03-2012
	 Riverside has also created a <u>Sustainability</u> <u>Workbook</u> for the city, available online and in hard copy. This manual provides dozens of easy steps which residents and businesses can take go green. The Workbook organizes sustainability steps under waste, water, energy and transportation. 	03-2012
	3. Riverside's Green Leadership Summit event, held on February 1st, 2012, <u>gathered</u> over 100 representatives of the community from local groups, schools, public and private entities to discuss progress toward the achievement of sustainability, as well as future steps. The Green Leadership Summit provided a venue for the sharing of experiences, expertise, strategies and ideas, and encouraged collaboration for the development of a healthier city.	03-2012