

BEACON
SPOTLIGHT
AWARD
WINNER
BEST PRACTICE
ACTIVITIES



City of Irvine

Sustainability Best Practice Activities









ILG INSTITUTE FOR
LOCAL GOVERNMENTSM
Promoting Good Government at the Local Level

City of Irvine

California communities are leading the fight against climate change. From small projects to large-scale programs, cities and counties are making great strides to create healthy, sustainable and economically prosperous communities. Participants in ILG's Beacon Program serve as leaders in this effort, making measureable contributions to reducing energy and greenhouse gas emissions, and sharing their sustainability best practices.

This document represents a collection of activities your agency has completed in 10 areas of sustainability. While local governments have a wide range of choices available to address climate change, these activities represent the unique opportunities and values in your community. These voluntary actions are essential to achieving California's goals to save energy, reduce greenhouse gas (GHG) emissions and create more sustainable communities.

SPOTLIGHT AWARD

SPOTLIGHT AWARD		SILVER LEVEL	GOLD LEVEL	PLATINUM LEVEL
Areas of Accomplishment				
	Agency GHG Reductions			
	Community GHG Reductions			
	Agency Energy Savings	2019 (9%)		
	Natural Gas Savings		2019 (13%)	
	Sustainability Best Practice Activities			2019
	Beacon Award			

Cities and counties throughout the Golden State should be proud of the accomplishments made through the hard work, innovation and collective community action. The Institute for Local Government applauds your achievements and thanks you for your continued participation in the Beacon Program.

The Beacon Program is sponsored by the Institute for Local Government and the Statewide Energy Efficiency Collaborative (SEEC). SEEC is an alliance between three statewide non-profit organizations and California's four Investor-Owned Utilities. 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.



Energy Efficiency and Conservation Activities

Silver

1. In partnership with Southern California Edison and SoCal Gas, the city has conducted “lunch and learn” presentations to key employees in facilities maintenance, signal maintenance, and project management about energy retrofit/upgrade projects at facilities that can save energy, resulting in utility cost savings. The city challenged employees at community centers to reduce energy use during the summer months. The facility that reduced their energy use the most was rewarded with free lunch and was recognized in the employee newsletter.

Gold

2. Through the local government partnership, audits were conducted of various Irvine municipal facilities to identify potential energy efficiency projects. The city has been successful with retrofitting its municipal facilities to realize both energy and utility cost savings. The retrofit projects include interior and exterior LED lighting, boiler and pool cover replacement at aquatic centers, HVAC upgrades, and variable speed drives. These projects helped the city achieve 964,075 annual kWh savings, 45,303 annual therm savings, and \$198,048 estimated annual energy savings.
3. The city completed a citywide project to convert traffic signal safety lights to LEDs that resulted in approximately 549,180 annual kWh savings and over \$203,000 in rebate dollars. The LED lights have a 10-year life cycle with a projected annual cost savings of \$160,000.

Platinum

4. The city conducted an energy walk to promote SCE’s Direct Install Program to small businesses. The program provides free lighting upgrades, including installation and equipment to help reduce energy use and utility costs. The city also conducted an outreach program to promote SCE’s Mobile Home Program to residents of the city’s mobile home communities. The program offers an energy audit and then recommends energy improvements, which are installed at no cost to the homeowner.





Energy Efficiency and Conservation Activities

Platinum

5. The city's website promotes resources for residents to be energy efficient in homes or multifamily units. The webpage also provides links to the state's Energy Upgrade California website, utility rebate and incentive programs, and tips to conserve energy.
6. The city developed a webpage dedicated to providing links and resources about utility program offerings, including rebate and incentives for residents and businesses. The community is encouraged to visit these pages to learn about how they can conserve energy and potentially receive incentives to offset improvement costs.





Water & Wastewater Systems Activities

Silver

1. In coordination with the Irvine Ranch Water District, the city has a long history of coordinating the technical and regulatory oversight of the use of recycled water serving non-potable uses, including landscape irrigation and certain uses within buildings. The city has invested significant resources and planning over many years to convert all median turf irrigation from potable to recycled water.

Gold

2. As part of regional watershed efforts, the city partners with Orange County Environmental Resources to educate and promote water resource protection through a comprehensive H2O Stormwater Program. The program launched a successful multi-year campaign called Overwatering Is Out during the drought, to engage the residents in taking actions to reduce urban runoff by changing watering practices, improving landscaping, and capturing rainwater.
3. The city has several programs in place to reduce water in parks and landscaping. Public projects are planned to reduce existing turf within medians with low-water use plants with recycled water drip irrigation systems.

Platinum

4. The city has sustainable landscape practices in place to conserve water and prevent pollution of urban runoff. All landscape planter beds are mulched and kept maintained at a 2-3" depth. Compost is used on athletic fields during the annual renovation. Non-toxic fertilizers are used on all city maintained landscapes.
5. The city requires certain new development and significant redevelopment projects to prepare and implement Water Quality Management plans to meet low impact development practices.
6. Since 2006, the city has approved over 31 regional natural treatment systems conducted as part of project approvals.





Green Building Activities

Silver

1. The city implemented a Green Building Program for municipal facilities to incorporate renewable energy, which has resulted in solar systems installed at seven new community centers. Four of these facilities are LEED gold certified, one is silver, and two are pending certification.

Gold

2. The city has developed and implemented sustainable landscaping standards for public agency facilities to reduce water consumption. All controllers are smart controllers that use daily weather data to automatically schedule the necessary amount of water.
3. The city incorporates water efficient plants and trees in agency landscaping. The city is developing plans to create a large-scale demonstration project at the civic center that highlights native and low-water use landscaping in an effort to educate the public on use of these low-impact development measures.

Platinum

4. The city coordinates technical and regulatory oversight of recycled water serving non-potable uses, including landscape irrigation and within buildings. Over 95% of the city maintained landscape is watered with recycled water.
5. Developer waste management plans are required by the Construction & Demolition Recycling Ordinance to divert a minimum of 75% of concrete/asphalt waste and 65% of other debris to reuse or recycling. This program keeps tens of thousands of pounds of development waste out of landfills each year.
6. The green building section on the agency's website helps residents and businesses find green building information and resources.





Waste Reduction and Recycling Activities

Silver

1. The city has a comprehensive waste reduction and recycling program for the commercial sector with financial incentives in place. The nonexclusive commercial waste hauler franchise agreement covers Irvine's largest commercial sectors and includes a tiered rate system that charges haulers less in franchise fees on waste delivered to material recovery facilities or recyclers, while charging the full-rate fee to haulers on waste they collect and deliver to landfills for disposal.

Gold

2. The city has a long-running program to encourage business waste audits. Through the program, the city retains a commercial recycling expert to conduct on-site waste audit evaluations and provide businesses with resulting recommendations at no charge to participating businesses.
3. A food scrap collection program for large food waste generators has been implemented. Through its commercial waste hauler franchise agreement, all Irvine waste haulers are required to provide food waste recycling collection services to their customers. In 2018, the city was awarded a three-year \$168,000 grant by Orange County for food waste recycling assistance programs.

Platinum

4. Opportunities for e-waste collection recycling are provided through the city's residential waste and recycling franchise agreement with Orange County Waste Management.
5. Disposal options for home-generated sharps to prevent injuries to waste collectors and processors are provided through the waste management franchise agreement.
6. Recycling at special events is provided by the city through a partnership with the Orange County Conservation Corps (OCCC). OCCC provides recycling collection of bottles and cans and helps in collection and consolidation of other recyclables. Waste Management provides recycling carts free of charge to event vendors to facilitate food waste recycling from special events.





Climate-friendly Purchasing Activities

Silver

1. The city has adopted and implemented standards for purchasing climate friendly products when feasible. The city purchases 30% recycled copy paper and provides recyclable and reusable cups, plates, and utensils, and encourages purchase and use of rechargeable batteries where appropriate.

Gold

2. The city encourages the practice of not purchasing new materials, such as office supplies and furniture by promoting the reuse of existing items stored in surplus. The city has an on-site warehouse where employees select surplus furniture instead of purchasing new items.
3. The city is implementing a green business certification program, which requires businesses to incorporate pollution prevention measures, such as the purchase of non-toxic cleaning materials in order to earn their green business certification.

Platinum

4. The city's Organic Pesticide Use Policy has now been successful for more than two years, setting a national standard. The city adopted an Integrated Pest Management Program, which is incorporated into landscape maintenance contracting and prioritizes the use of organic pesticides in all city properties.
5. Waste Management and the city's commercial franchise waste haulers are contractually required to use fuel efficient vehicles, which run on natural gas and meet state standards for low carbon fuels.
6. The city's purchasing division implements a Local Vendor Preference Program, which provides an advantage to qualified Irvine businesses that bid on city competitive procurements for supplies and equipment.





Renewable Energy and Low-Carbon Fuels Activities

Silver

1. Fleet Services reviews the design, operational requirements, and availability of vehicle platforms and replacement vehicle cost.

Gold

2. In partnership with SoCal Gas, the city installed a compressed natural gas (CNG) refueling station with the goal of promoting alternative fuel vehicles. The station is accessible to the public at the Irvine Operations Support Facility and is managed by Clean Energy.
3. The city currently has 68 natural gas vehicles, 10 pickups with stop-start technology, 15 hybrid vehicles, and one electric vehicle (EV) in its fleet.

Platinum

4. The city provides information about renewable energy and solar rebates and incentive programs on agency webpage.
5. The city has installed EV charging stations at public facilities, such as the train station, and is identifying additional locations for infrastructure. UC Irvine and several retail centers around the community have also installed EV charging stations.
6. The city implements a bike sharing program for employees by offering bikes for daily use. The city promotes bike to work month in its internal employee newsletter, intranet, and at community centers. Bike racks are installed at agency facilities to promote bicycle use by agency employees and visitors.





Efficient Transportation Activities

Silver

1. The city implemented intelligent transportation system (ITS) for synchronized signals along corridors. Synchronized signals allow cars to move along corridors with fewer stops or shorter idling times at intersections.

Gold

2. The city provides iShuttle bus service for last mile commuting from train stations to major employment centers in the city. The iShuttle offers a CNG rubber tire system with six routes operating during peak commute hours on weekdays. From July-December 2018, the iShuttle had a total of 108,431 boardings, reduced 27,108 auto trips, reduced 2,136,640 vehicle miles traveled, reduced 3,541 pounds of emissions, and removed 424 cars from the road.
3. To assess long-term mobility needs, the city is pursuing a strategic Active Transportation Plan and circulation phasing report.

Platinum

4. Irvine has a bikeway network with construction of nearly 65 miles of off-street bikeways and more than 300 miles of on-street bikeways. The city is currently adding signage to bike trails and shares information through the Irvine Shares the Way Program.
5. The city imposes a transportation demand management (TDM) fee in the Irvine Business Complex (IBC) and Spectrum areas. Dedicated revenues from the IBC fees promote alternative transportation and help pay for iShuttle service.
6. In an effort to reduce congestion, the city is working with major employers in the community on a pilot autonomous electric vehicle program to take employees in Irvine to major points of interest around the city.





Land Use and Community Design Activities

Silver

1. Village zoning in Irvine maximizes short trips and walking. Further, the city developed General Plan policies that integrate diverse land uses.

Gold

2. As part of the 6th cycle Housing Element update for the 2021-2029 planning period, city staff and consultants will identify potential infill development sites and maintain an inventory of vacant and underutilized sites for developing housing for all income levels to accommodate Irvine's regional housing needs assessment.
3. The city has appropriate sites and zoning designations for recycling processing facilities and manufacturing that uses recycled materials.

Platinum

4. The city is addressing GHGs and adapting to climate change through a multi-pronged approach: developing a Strategic Energy Plan, conducting a feasibility assessment of a community choice energy program, completing a climate change strategy associated with the General Plan, developing GHG mitigation measures, and developing a Local Hazard Mitigation Plan.
5. The city participates in regional planning efforts, such as processes to develop and implement the regional sustainable communities strategy (SCS) and, where appropriate, goals, objectives, and policies will be updated through the update process currently underway to align with the regional transportation plan (RTP).
6. To assist in assessing long-term mobility needs, the city is pursuing a strategic Active Transportation Plan (ATP) and circulation phasing report. The ATP will guide the development of pedestrian and bicycle facilities and implement upgrades to existing facilities. The plan will create one master document, which will review and recommend best practices.





Open Space and Offsetting Carbon Emission Activities

Silver

1. The city works in partnership with Irvine Ranch Conservancy to provide more than 300 days annually of docent led hiking, mountain biking and fitness classes within Irvine's open space at no cost to participants.

Gold

2. The city, in partnership with Irvine Ranch Conservancy and Sage Environmental Group, is currently implementing a 4-acre restoration project at Bommer Meadow. The scope of the project is to convert non-native grasslands into native coastal scrub habitat.
3. The city was deeded 152 acres of open space property in Portola Springs Village. The property is a capped Native American archaeological site and will remain permanent open space with a system of trails winding through it and will connect with nearby housing tracts.

Platinum

4. Restoration activities at the Quail Hill Open Space focus on general management of weeds and planting of native container plants. Monthly restoration stewardships continue at the site with volunteers participating in native container planting and removal of black mustard.
5. The Shady Canyon Turtle Pond continues to be managed by the city. Recent activity focused on ensuring an adequate water supply in the pond and controlling non-native plant species.
6. Since 2009, the city has worked with Irvine Ranch Conservancy to organize a citizen-science based raptor nest monitoring program to document breeding activity of raptors across the Irvine Ranch.





Promoting Community and Individual Action Activities

Silver

1. The city's environmental programs division conducts community outreach events to educate and provide tools and resources for residents and businesses to be energy efficient and sustainable. One event is the city's annual Irvine Global Village Festival where the city and its partners promote energy conservation, recycling and waste reduction, plus provide materials to educate the community about incentive programs.

Gold

2. The city distributes reusable and recyclable products at community events to encourage residents to use earth friendly items and reduce waste reduction.
3. The city's uses its website and social media accounts to encourage residents to engage in sustainable activities and provide information on workshops and events related to the environment.

Platinum

4. The Green Ribbon Environmental Committee seeks to increase public participation in energy conservation and sustainable practices, helping the city serve the community through advancing environmental policy initiatives and programs. It advises the city council on matters related to climate protection, energy, recycling and waste management, sustainability, transportation, and water, as well as environmental and energy goals.
5. The city works directly with the Irvine Unified School District to provide presentations on recycling and environmental issues relevant to grades K-8 and afterschool programs.
6. The city provides information to city employees and residents regarding local bike events sponsored by Orange County Transit Authority during the month of May via the city website, social media, and newsletters.



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