



County of Yolo

Sustainability Best Practice Activities



County of Yolo

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 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			2017
	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

 In March 2016, Yolo County, along with the City of Davis, agreed to form a Joint Powers Agency to purchase electricity for residents and businesses in the county and city through a community choice aggregation program. Called the Valley Clean Energy Alliance (VCEA), the program also now includes the City of Woodland, which joined in May 2017. The VCEA will become operational in early 2017 and will provide an increased level of electricity generated from renewable sources.

Gold

- 2. Yolo County participates in PACE programs that offer residents a mechanism to finance energy efficiency and water conservation improvements with no upfront expenditures.
- 3. In 1982, Yolo County adopted a Comprehensive Energy Plan related to transportation, electricity, and natural gas usage in the county.

- 4. On September 11, 2007, the Board of Supervisors unanimously adopted a resolution declaring that Yolo County was joining with 13 other counties in the United States to participate in the Cool Counties Climate Stabilization Declaration, thereby making Yolo County one of only 13 charter counties in the entire country making this commitment. This commits Yolo County to seek to reduce greenhouse gas emissions by 80% by the year 2050.
- 5. In 2006, Yolo County joined the Climate Registry and remained a member until 2009, when the Registry ceased to offer a verification process. This third party verification of GHG emission reductions enabled the county to quantify energy and related GHG emission reductions.
- 6. Yolo County has completed a wide range of energy efficiency retrofits and projects for county facilities.
- 7. In 2010, Yolo County established the Yolo County Energy Watch, in conjunction with PG&E, to promote energy efficiency in small and medium size businesses, as well as in the residential and agricultural sectors.
- 8. Yolo Energy Watch paid for the City of Woodland and Yolo-Solano AQMD to join the Climate Registry.
- 9. Yolo Energy Watch helped Woodland complete a Climate Action Plan through a partnership with students and faculty at UC Davis.





Water & Wastewater Systems Activities

Silver

1. The new Herbert Bauer, M.D. County Health and Alcohol, Drug and Mental Health agency building included waterless urinals, thus saving a potential 400,000 gallons of water annually.

Gold

- In conjunction with the El Macero County Service Area and the Yolo County Resource Conservation District, in June 2015, the county offered a workshop in unincorporated El Macero area (south of Davis) for residents. Topics included how to check water use online, free leak testing information, converting from a sprinkler to drip irrigation system and lawn conversion to drought tolerant native plants.
- 3. In 2011, the Yolo County Agriculture Commissioner conducted an Agricultural Pump Efficiency workshop for Yolo County farmers to increase both water and energy efficiency.

- 4. In 2016, during the drought, and in conjunction with the Madison Community Services District, Yolo Energy Watch sponsored a "Festival of Services" that featured water and energy efficiency techniques and tools.
- 5. In 2016, during the drought, Yolo Energy Watch partnered with the City of Woodland to conduct a hands-on community demonstration of water and energy efficiency methods and tools.
- 6. In 2016, in partnership with the Water Conservation Coordinator for the City of West Sacramento, Yolo Energy Watch conducted a water and energy efficiency community workshop at the public library.
- 7. In 2016, during the drought, Yolo Energy Watch, in conjunction with the City of West Sacramento, conducted "parking lot" festivals at Home Depot and Lowe's hardware stores in West Sacramento to demonstrate and promote water and energy efficiency methods and tools.
- 8. In 2012, Yolo Energy Watch participated in the Harper Solar Garden Project by providing a solar powered irrigation system to be used by the students at the junior high school in Davis.





Green Building Activities

Silver

1. Even prior to adoption of a Climate Action Plan, Yolo County adopted a policy that all new county buildings meet LEED standards.

Gold

- 2. Yolo County designed and built the Winters Branch Library Replacement Project to meet LEED Silver criteria. The project includes a new technology that freezes water in a large storage device during nighttime hours and uses the ice to reduce daytime cooling by as much as 60% during the next day.
- 3. The West Sacramento Branch Library Replacement Project was designed and built to meet LEED Silver criteria. The green building results in reduced carbon emissions and in an earth-friendly design.

- 4. The new Herbert Bauer, M.D. Health and Alcohol, Drug & Mental Health building was built to LEED standards. It includes reduced water usage, building location and orientation to reduce heating and cooling loads, provision for bicycle parking, water efficient landscaping, shaded parking, waterless urinals, energy generation via a photovoltaic array, adoption of time-of-use metering, optimizing building reflectance in place of absorption, energy efficient appliances, recycling, salvaging and other techniques during construction, and use of paint with low levels of volatile organic compounds.
- 5. The Board of Supervisors adopted a directive that construction of the new county jail be as energy and resource conservative as permitted by law.
- The 2010 Yolo County Climate Action Plan included a policy that new residential construction exceed the then current Title 24 building standards by 15%. In addition, new residential construction over 3,500 square feet was required to exceed Title 24 by 30%.





Waste Reduction and Recycling Activities

Silver

1. Yolo County has long offered recycling opportunities to residents who live in the northern, unincorporated part of the county through the Esparto Recycling and Transfer Station. The facility offers free recycling of glass, plastic, mixed paper, metals, used oil and filters, cardboard and e-waste. Since most of the rural parts of the county do not have curbside recycling, the Esparto facility makes it possible for residents to recycle. The facility is open Wednesdays and Saturdays.

Gold

- 2. The Yolo County Central Landfill, owned by the county, provides a wide range of services to county residents. These include a permanent household hazardous waste drop-off facility, free mattress recycling, e-waste recycling, a wood waste drop off venue, appliance and white-goods drop off venue, and small quantity hazardous wastes generator drop off options for businesses.
- 3. As part of a bigger diversion strategy, in 2016, The Big Blue Building was inaugurated at the Yolo Central Landfill. It allows Yolo County residents to drop off usable items, such as furniture, that otherwise would be disposed of. These items are sold at heavily discounted prices to county residents. The program has been immensely popular and successful.

- 4. The Central Landfill's bioreactor uses advanced anaerobic digestion to generate methane and energy from not only landfill gas but also from recovering remaining landfill material. The main goal is to speed up decomposition so that instead of taking decades to turn solid waste into methane, it can be done in approximately ten years.
- 5. In 1985, prior to the county owning the landfill gas facility, Yolo County worked with a private company to produce electricity from landfill methane gas at the landfill. The completed gas to energy facility generated 20,000 kilowatt hours per year of electricity Then the county took over ownership of the facility.
- 6. The now county-owned landfill gas-to-energy plant is located just south of the landfill's Waste Management Units 4 and 5 and west of the water storage pond. The facility produces approximately 4 MW of electricity from landfill methane gas that is sold to the Sacramento Municipal Utility District.





Climate-friendly Purchasing Activities

Silver

1. In 2007, Yolo County conducted the "Roadway Rehabilitation Project" using rubberized asphalt concrete to over six miles of Yolo County roads. The project used 16,000 tires that would have otherwise gone to landfills in California. This project helped to promote recycling and reuse of tires.

Gold

- 2. Yolo County adopted a countywide Appliance Replacement Program for Yolo County facilities to replace, in conjunction with utility rebates, older, energy inefficient appliances, such as refrigerators with energy efficient Energy Star appliances.
- 3. Yolo County has a policy and practice of purchasing and using paper with 30% recycled content.

- 4. In 2008, Yolo County adopted a comprehensive Green Procurement Policy that requires all county departments to promote recycling, waste prevention, purchase of environmentally preferred products and recycled content products.
- 5. The Yolo County Purchasing Policy goes beyond requirements for paper, printing cartridges, cleaning supplies, and other routine purchases. It also requires encouragement of waste prevention, recycling, market development, and use of recycled/recyclable materials through lease agreements, contractual relationships, and purchasing policies with vendors, contractors, businesses, and other governmental agencies.
- 6. In 2008, Yolo County required design and implementation of a Construction and Demolition Ordinance that requires all post-2010 new county owned or leased buildings be constructed following Green Building Council recommendations.
- 7. Yolo County requires an Employee Education and Outreach Program to instill a belief and enthusiasm in county employees that demonstrate the county's concern for the environment by actively participating in green procurement policies and recycling programs.
- 8. Yolo County requires each department to report annually on efforts made to reduce the county's carbon footprint or implement new sustainability programs.





Renewable Energy and Low-Carbon Fuels Activities

Silver

1. Yolo County has been a national leader in renewable energy projects for agency facilities. As of 2013, it is the only county in the U.S. that is grid positive, meaning it produces more electricity through renewable energy projects than the county facilities use. Through these investments, the county enjoys an annual revenue stream of about \$2 million, which is used to help the county's general fund needs.

Gold

- 2. Yolo county owns and operates renewable energy that generates 7MW of renewable power at three sites: at the Justice campus (1 MW), the Beamer and Cottonwood campus (.8 MW on the ground and .2 on the roof of the building) and at the county Grasslands Park (5 MW ground mounted tracker). The three systems will produce over \$60 million in net revenue for Yolo County over 35 years, over and above the debt service for the projects. The projects were accomplished with a zero capital investment, because the system pays for the debt service each year.
- The contractor for the above solar project, in response to a request from the county, donated \$1.2 from its educational foundation to the Yolo County Office of Education. This enabled Yolo County to establish K-12 Energy Academies for local students. The academies teach students about environmental science, renewable energy technology and energy auditing.

- 4. In 2011, the Board of Supervisors authorized the county to enter into a no-cost solar installation agreement to install solar PV panels at the Davis, Clarksburg, Esparto, Knights Landing and Yolo libraries. The project will generate over \$490,000 savings to the library fund from energy savings over the next twenty-five years.
- 5. The county's new Bauer Alcohol, Drug and Mental Health Building includes solar PV panels that produce 40% of the building's power needs.
- 6. In 2009, the Board of Supervisors approved using New Clean Renewable Energy Bonds (CREBs) and Qualified Energy Conservation (QECBs) to install a solar array on the Monroe Detention Center Site. The project installed a 1 MW of solar array on the facility.
- 7. Yolo County has received numerous awards recognizing its leadership in embracing innovative, renewable solar energy projects.





Efficient Transportation Activities

Silver

1. In 2014, in partnership with the City of Woodland, Yolo County installed EV charging stations in Downtown Woodland at the city library and near city hall.

Gold

- 2. Yolo County's General Plan includes a policy to reduce vehicle miles traveled in new development through transportation management best practices.
- 3. The county installed bike lanes on about five miles of County Road 98, a main road connecting the City of Davis and the City of Woodland, thus facilitating safe bicycle travel, including commuters, between the two cities.

- 4. To help the City of Woodland, Yolo County promotes Woodland's Safe Routes to Schools Program through its website and other materials.
- 5. Yolo County first installed charging stations for electric vehicles at the Planning and Public Works Department building. Subsequent charging stations were installed at the Herbert Bauer, M.D. Health and Alcohol, Drug & Mental Health building. Charging stations will be added to all future facilities as well.
- 6. The Yolo County Transportation District's YoloBus fleet has been converted from diesel to natural gas use. Yolo County is a member of the Transportation District.
- 7. Yolo County requires staff to rent alternative fueled or clean burning fueled vehicles when traveling, and sets a goal of reducing fuel consumption by 10% through purchase of these vehicles.





Land Use and Community Design Activities

Silver

The county has an historic record of agricultural land preservation, strictly observed, dating back more than 50 years. A central tenet of all county land use decisions is that new growth be directed towards the cities as infill rather than sprawl. As a result, about 85–90% of Yolo County residents live in one of the four incorporated cities, while only 20,000 residents live in the unincorporated area of the county. The Yolo County General Plan specifically requires direction of new growth to the extent feasible to existing communities in order to reduce vehicle miles traveled.

Gold

- The General Plan also includes policies that encourage existing communities in the unincorporated towns to develop in a sustainable, "smart growth," manner, with housing, jobs, and services similar to those in established communities.
- 3. In 2015 and 2016, Yolo County adopted a Solar Facilities Ordinance to guide planning and approval of solar PV arrays on agricultural land. The ordinance includes provisions for small, medium, large and very large systems and was adopted after extensive public input from the agricultural community.

- 4. Well before it was common practice, in 2009, Yolo County included over 350 goals, policies, and actions related to climate change and sustainability in its 2030 General Plan Update. Specific goals, policies, and action items are incorporated into all the General Plan elements, including Transportation and Land Use.
- In 2010, Yolo County adopted a Climate Action Plan to guide its greenhouse gas and sustainability actions. The plan includes a mandatory 2020 GHG reduction target to 1990 levels, 27% below 1990 levels by 2030, and 80% below 1990 levels by 2050.
- 6. The General Plan establishes complete streets requirements for future transportation infrastructure, including maximum 600 foot block lengths, narrow streets with adequate tree shade, separated sidewalks, convenient and secure bike parking, and avoidance of cul-de-sacs and other pedestrian and bicycle barriers.
- 7. The General Plan goal of reducing greenhouse gas emissions and planning for adaptation to future consequences of climate change incudes direction that the development review process be used to achieve measurable reductions in greenhouse gas emissions.





Open Space and Offsetting Carbon Emission Activities

Silver

1. Agriculture is an essential part of the Yolo County economy, as well as its heritage. Yolo County has a more than 50-year record of agricultural land preservation with population growth directed to cities: infill rather than sprawl. Yolo County's Ag and Preservation Policy is one of the most effect measures available to a rural, agbased county.

Gold

- 2. Yolo County established the Yolo Ag Fund as a central component of the county's efforts to support agricultural sustainability in the face of potential changes to the existing landscape of the county.
- 3. Dedicated in 2013, the Hanna and Herbert Bauer Memorial Garden helps residents overcome barriers to obtaining fruits and vegetables by increasing access to fresh produce and education on how to grow produce and encouraging appreciation for locally sourced food items.

- 4. As a result of the 2020 goals specified in the General Plan, the Yolo County Agricultural Commissioner initiated the Farm to School Yolo Program to promote local agricultural viability and to reduce food miles and thus CO2 emissions.
- 5. The Yolo County General Plan requires the Agriculture Commissioner to inform Yolo farmers about methods to reduce nitrogen fertilizer use with minimal effect on crop yield.
- Yolo County's Agricultural Land Mitigation Program has long required mitigation for farmland conversions at a 1:1 ratio (one acre permanently conserved for every acre converted to urban development or other nonagricultural uses).
- 7. Yolo County has given several grants to the Yolo Land Trust to help the Trust complete multiple conservation easements to preserve open space and agricultural land in the county.
- 8. The county Planning & Public Works operates a small nursery and provides tree planting for county facilities.
- 9. The county General Plan encourages forestation as a means of storing carbon dioxide with the goal of doubling the tree canopy in unincorporated communities by 2030.





Promoting Community and Individual Action Activities

Silver

1. In 2007, Yolo County organized the Yolo County Climate Change Compact. The Compact holds bi-monthly meetings to share information on energy efficiency, renewable energy, greenhouse gas reduction, and sustainability.

Gold

- 2. In 2016, Yolo County sponsored a "Festival of Services" for the unincorporated community of Madison to promote water and energy efficiency.
- 3. Yolo Energy Watch provides "watt-meters," a device to measure the amount of electricity being used by appliances, to every library in the county. The watt-meters are encased in a container that looks like a book, and can be checked out just like a book by any resident with a library card. These watt-meters were also provided to schools for use in their libraries and by science teachers.

- 4. The Yolo Energy Watch partnered with the Woodland Tree Foundation over a three-year period to encourage tree planting to shade both residences and school facilities, thereby reducing the need for air-conditioning.
- 5. The Yolo Energy Watch initiated a "Young Energy Leaders" Program over a three-year period to place high school and UC Davis students as interns in local community organizations working to encourage energy efficiency and renewable.
- 6. In conjunction with UC Davis Extension's Studio 30 college course, Yolo Energy Watch sponsored a three-quarter class for students to imagine an "Eco-City" of the future. The class included speakers and materials for students to understand the elements of a Climate Action Plan. Students then developed written and visual materials to describe and display what an energy efficient city with minimal greenhouse gas emissions would look like and how it would function in terms of transportation, building efficiency, land use, water and energy efficiency, renewable energy sources, etc.
- 7. Yolo County sponsored a collaborative Purchasing Program for solar photovoltaic systems. Because the program identified a large number of persons willing to participate, this "bulk purchasing" approach significantly lowered the cost of a solar system for each participant.





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