



City of San Rafael

The First-Ever Beacon Award Winner



In September of 2012, the City of San Rafael became the first-ever winner of the Beacon Award. The Beacon program, sponsored by the Institute for Local Government and the Statewide Energy Efficiency Collaborative, recognizes and supports California cities and counties that are working to reduce greenhouse gas emissions, save energy and adopt policies and programs that promote sustainability. Cities and counties are honored with silver, gold or platinum level Spotlight Awards for undertaking sustainability activities in ten areas and for achieving measurable energy and greenhouse gas reductions.

The full Beacon Award recognizes an agency's holistic approach to addressing climate change. It is awarded only when an agency completes all six elements necessary to achieve the award. The Institute for Local Government and the Statewide Energy Efficiency Collaborative congratulate the City of San Rafael for being the first to win the prestigious Beacon Award.



Damon Connolly, Barbara Heller, Gary O. Phillips and Andrew Cuyugan McCullough accepting the Beacon Award



The Beacon Program is funded by California utility customers and administered by Southern California Gas Company, San Diego Gas & Electric Company, Pacific Gas and Electric Company and Southern California Edison, under the auspices of the California Public Utilities Commission.

For more information about the Beacon Award Program, visit www.ca-ilg.org/BeaconAward

Accomplishments



San Rafael City Hall

In 2010 San Rafael became the first participant in the Beacon Award Program. Three years later, San Rafael became the first city or county to complete all six elements necessary to win the Beacon Award. The League of California Cities recognized San Rafael's silver-level Beacon program accomplishments at its 2013 Annual Conference. The city's achievements included:

- Agency greenhouse gas reductions of 19.2 percent (2005–10);
- Community greenhouse gas reductions of 8.1 percent (2005–10);
- Agency electricity savings of 5 percent (2005 baseline);
- Outstanding efforts to promote energy efficiency in the community; and
- Participation in 35 activities in the Institute for Local Government's 10 Sustainability Best Practice Areas.

The Road to Success



Bike Trail, San Rafael

To answer the question of how the City of San Rafael won the first-ever Beacon Award, one must look to its culture and willingness to consider and apply innovative solutions to a range of community concerns.

The city's elected officials, staff and residents foster a relationship based on mutual respect and cooperation. Its components include exemplary public engagement, open communication between elected officials and the community, ongoing education and high expectations.

Engaged residents and businesses work with city staff and elected officials to examine constraints and opportunities as well as the short-term gains and long-term impacts of decision-making. The leaders focus on the big picture but take an incremental approach, partnering with the community to minimize the risks and costs associated with innovation.

As a result, the community has a clear vision and a comprehensive strategy which recognizes that one solution or approach can provide numerous benefits

and address multiple problems.

The city's leadership on conservation and environmental issues has attracted open-minded, forward-thinking residents who respect the environment and are committed to participating in efforts to preserve it.

San Rafael employs a full-time sustainability coordinator, housed in the City Manager's Office, who helps support a network of committees, teams and partners that help prioritize and implement the sustainability initiatives. The coordinator assists in facilitating three teams:

- The Employee Green Team includes staff from each city department. It meets monthly and develops activities to encourage staff or influence city operations to be more sustainable in the areas of waste reduction, recycling, water conservation, energy conservation and purchasing;
- The Employee Commute Program Committee encourages staff to reduce single-occupant commutes through carpooling, biking and using transit; and
- The City Council Subcommittee on Sustainability includes two council members who help set policy direction and prioritize staff time and projects related to the city's adopted Climate Action Plan.

The efforts of these teams culminate at the Climate Action Plan Update Forum, a quarterly meeting to update community members about and share resources toward implementing the city's Climate Action Plan. These groups and meetings are carefully designed to be fun, interactive and substantive to keep the participants on track and motivated.

The Climate Action Plan

San Rafael adopted its Climate Action Plan in 2009. The goals are to reduce greenhouse gas emissions by 25 percent by 2020 and to achieve an ambitious 80 percent reduction by 2050. The city has made steady progress toward meeting its goals. In the five years between 2005 and 2010, the city reduced greenhouse gas emissions by 8.1 percent or 30,329 metric tons of carbon dioxide equivalents. (A carbon dioxide equivalent is a term that translates different types of greenhouse gases into carbon dioxide, based on their climate-warming potential.) While the economic downturn and state policies contributed to these reductions, a significant drop resulted from local efforts to conserve energy and water, reduce vehicle miles traveled and divert waste from landfills.

To implement its Climate Action Plan, San Rafael relies on three guiding principles:

1. **Maintain a steady pace.** Whether resources are abundant or limited, San Rafael identifies a few achievable goals from its long term sustainability strategy to implement each year. As a result, the city’s sustainability efforts remain consistent and achievable;
2. **Borrow and share expertise and resources.** From funding proposals to ordinance development, the city both shares and borrows expertise to help move projects forward. It relies on city staff and the community to take ownership of sustainability objectives and programs, thus expanding its expertise and resources; and
2. **Cultivate and complement community-based programs.** The city approaches sustainability as a communitywide effort — with its residents, businesses and local government all serving as equal and important partners.



“The danger of plans is that they often sit on the shelf. We are always asking ourselves, “Where do we want to take our community?”

Kate Colin, San Rafael City Council Member

Community Emissions 2005 vs 2010

Sector	2005 Metric Tons CO ₂ e	2010 Metric Tons CO ₂ e	Change Metric Tons CO ₂ e	% Change
Residential	89,715	87,694	-2,021	-2%
Commercial/Industrial	88,116	74,713	-13,403	-15%
Transportation	177,338	167,859	-9,479	-5%
Off-Road	4,721	4,095	-626	-13%
Water	1,501	1,040	-461	-31%
Wastewater	1,479	1,517	38	3%
Waste	12,974	8,598	-4,376	-34%
Total	375,845	345,516	-30,329	-8%

By following these guiding principles, San Rafael has achieved a number of remarkable milestones. The following examples illustrate the accomplishments that helped contribute to San Rafael’s success in the Beacon Award program and describe the city’s plans to preserve its assets and create a more economically and environmentally sustainable community.

Waste Reduction

The City of San Rafael partners with Marin Sanitary Service (the city's waste hauler located in San Rafael) to help it meet ambitious waste reduction and recycling goals.

Pigs and peacocks have been onsite at the Marin Sanitary Service Recycling & Resource Recovery Center for years, naturally composting the extra food scraps brought into the facility, but now there's a new machine in town.



"Direct engagement is the key. We really work with our customers to help them understand what they are becoming a part of."

Kim Scheibly, Municipal Contract and Communications Manager for Marin Sanitary Service



Pigs at Marin Sanitary Service Center

Food to Energy

In 2014 the sanitation agency unveiled its new "big blue machine," which processes 50 tons of commercial and residential food waste from the city's restaurants and businesses, thus keeping it out of the landfill. The processed food is sent to the sewage treatment plant, where it is converted into biogas that is used by the wastewater treatment plant. This allows the agency to use less natural gas at the plant, which results in a reduction of 1,723 metric tons of carbon dioxide greenhouse gas emissions and a savings of approximately of \$350,000 per year.

Energy Efficiency

From 2011–13, San Rafael converted its traffic signals and 740 streetlights to light-emitting diodes (LEDs), which use approximately half of the electricity of the previous lights. The streetlight retrofit alone reduces energy usage by 189,500 kilowatt hours (kWh) each year, which saves the city approximately \$24,000 annually. San Rafael funded the project through a no-interest loan from Pacific Gas and Electric (PG&E) and is paying it back over approximately 5 and a half years with the savings generated by the project.

Following that, the city replaced a chiller unit of its heating and air condition system at San Rafael City Hall in 2013. In addition to securing zero-interest on-bill financing, the city received a \$10,000 rebate from PG&E for the project. It is projected to reduce energy use by 68,291 kWh and save 361 metric tons of greenhouse gas emissions annually.

Renewable Energy

Community choice aggregation programs offer a way for cities and counties to provide residents and businesses with electricity purchased from a third-party provider and delivered through existing distribution and transmission systems. San Rafael joined the Marin Energy Authority, California's first community choice aggregation program, in 2010. As a result, 50 percent of the electricity for agency facilities (and most of the community) comes from renewable energy sources. The city plans to subscribe in the future to the authority's Deep Green Program, which will provide 100 percent renewable energy for all San Rafael agency buildings and operations.

San Rafael is currently leading an effort to help agencies in Marin, Napa and Sonoma counties obtain discounts on purchasing solar photovoltaic arrays for municipal facilities through the Solar SEED Fund group-purchasing program. The program provides funding and technical assistance to participating agencies to help install solar at a discounted rate. Agencies that successfully complete projects will then return a portion of the savings back to the fund for development of future renewable energy initiatives.

Green Building

This is not the first time San Rafael has promoted sustainable policies throughout the region. In 2007 San Rafael led a countywide effort to adopt green building standards for both new construction and remodeling projects. The model ordinance was considered one of California's most rigorous at the time. Three years later the new California Green Building Standards Code (CALGreen) was adopted, creating similar requirements throughout the state. True to its history of leadership, San Rafael adopted the voluntary option of the CALGreen Code, which requires more stringent green building measures that reduce the use of water, energy and volume of waste going to landfills.



San Rafael Fire Department's Engine 51 is equipped with solar panels to charge the battery to run electronic devices on board.



"Our short and long term goals are wedded. We are trying to create a cultural shift around the region and partner with neighboring cities that may not have the opportunities or resources. It's just a more efficient way of doing things."

Cory Bytof, City of San Rafael
Volunteer & Sustainability
Coordinator

Efficient Transportation



San Rafael Transit Center

Like many other California cities, traffic congestion is an ongoing issue in San Rafael. More than 60 percent of the city's community greenhouse gas emissions and 40 percent of the agency's emissions come from private vehicles driving on local roads and Highway 101, which runs through the city.

To address the emissions that the city government generates, it launched a creative employee commute campaign, offered an alternative four-day work schedule for some city employees and began encouraging employee carpools, ridesharing and bicycling to work. Since 2005, the city has seen a reduction of employee commute-related vehicle miles traveled and has cut greenhouse

gas emissions by 37 percent (or 499 metric tons of carbon dioxide equivalent).

In another effort to address greenhouse gas emissions from transportation, San Rafael is planning for two stations of the new Sonoma Marin Area Rail Transit (SMART) line that will be located in the city's major employment areas. The SMART train, to be completed in 2016, is expected to reduce community greenhouse gas emissions by 180 metric tons of carbon dioxide equivalent.

As a complement to the SMART stations, San Rafael is partnering with several transit agencies and other local jurisdictions to leverage

transportation grants to develop bicycle and pedestrian paths into and throughout the city. When complete, the SMART project will include one of the longest, continuous bicycle and pedestrian pathway systems in the nation.

The city has been making improvements to encourage biking and walking and adopted its Bicycle and Pedestrian Master Plan in 2011. With full implementation of the Bicycle Pedestrian Master Plan, San Rafael expects an estimated reduction of greenhouse gas emissions of 1,269 carbon dioxide equivalents, comparable to taking nearly 276 passenger vehicles off the road each year.

Community Involvement



City of San Rafael Resilient Neighborhood Eco-Team

(Top Row) Ester Beirne, Stephanie Lovette, Gina Vaziri, (Bottom Row) Vihn Pham and Lisa Goldfien



“You must truly involve the community. Much of desire, ideas and momentum come from them. They are such a big part of everything we do.”

Damon Connolly, San Rafael Vice Mayor

The community is San Rafael’s secret ingredient in its sustainability formula. Community-based organizations, such as Sustainable San Rafael, advocate for sustainability programs and collaborate with the city on educational activities and initiatives. The city leverages and supports community-based programs, such as Resilient Neighborhoods, a carbon reduction and community-building program challenge that addresses climate change through neighborhood eco-teams. The program, run entirely by community volunteers and interns, encourages teams or families to sign up and pledge to take easy, everyday actions to reduce energy and carbon emissions. While the program is offered throughout the county, San Rafael offers direct support, providing interns and administrative resources. More than 50 households participate, representing 150-plus residents. This program has helped reduce greenhouse emissions from the residential sector by 493,000 pounds of carbon dioxide equivalents each year.





The Institute for Local Government promotes good government at the local level with practical, impartial and easy-to-use resources for California communities.

ILG is the nonprofit 501(c)(3) research and education affiliate of the League of California Cities and the California State Association of Counties.

To learn more about ILG, visit: www.ca-ilg.org

To learn more about the Beacon Award, visit: www.ca-ilg.org/beacon-award-local-leadership-toward-solving-climate-change

To learn more about how to participate in the Beacon Award program, visit: www.ca-ilg.org/how-participate-beacon-program

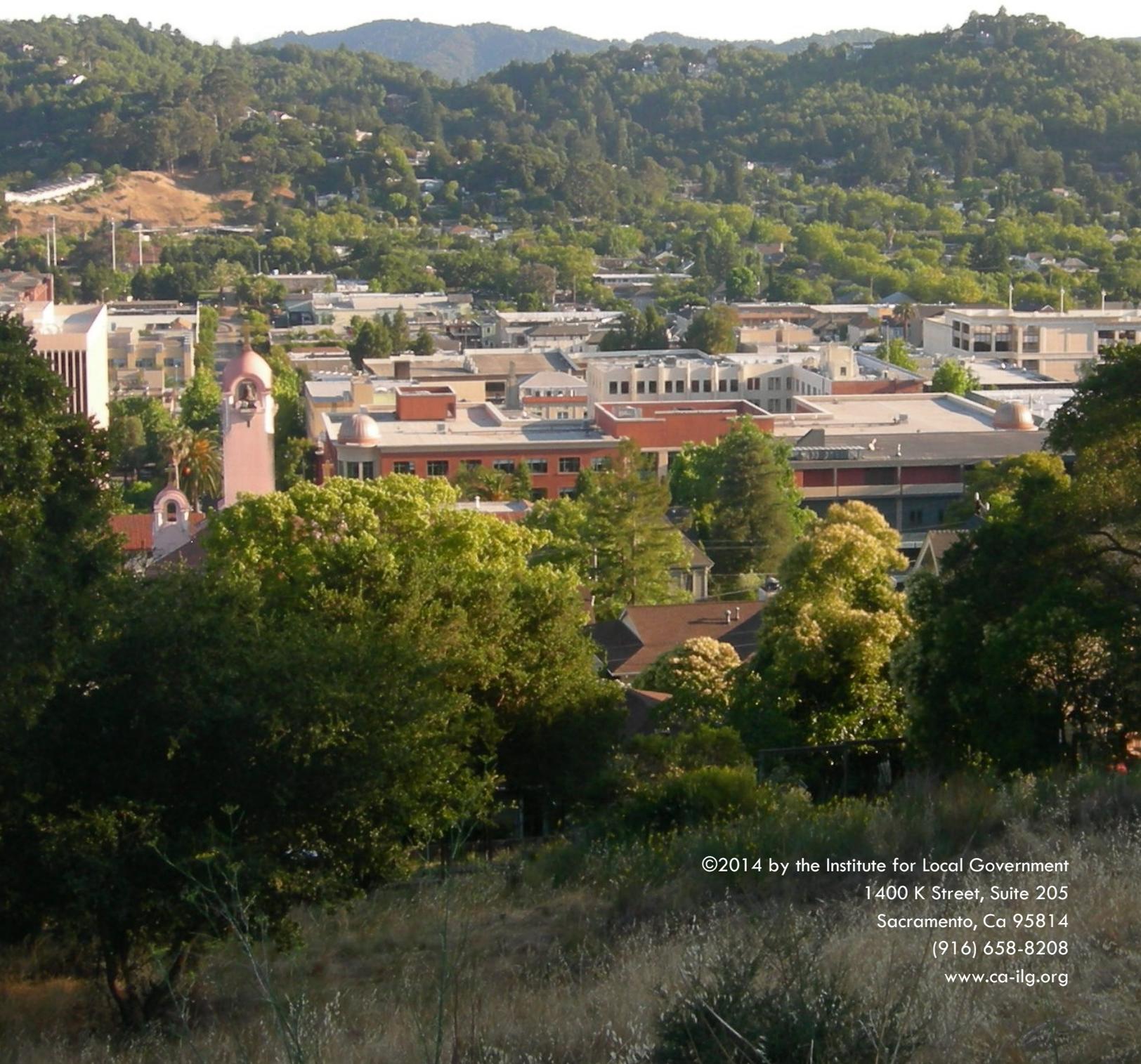
The information in this publication is based on interviews from elected officials, community leaders and key staff members working in the City of San Rafael. Thank you for your time and efforts.

To learn more about San Rafael's sustainability efforts visit: www.ca-ilg.org/beacon-award-participant-profile/city-san-rafael



INSTITUTE FOR LOCAL GOVERNMENTSM

Promoting Good Government at the Local Level



©2014 by the Institute for Local Government
1400 K Street, Suite 205
Sacramento, Ca 95814
(916) 658-8208
www.ca-ilg.org