



StopWaste is the Alameda County Waste Management Authority the Alameda County Source Reduction and Recycling Board, and the Energy Council operating as one public agency. StopWaste helps local governments, businesses, schools and residents with projects and initiatives that: • Increase recycling and reduce waste • Develop and expand markets for recycled materials • Provide technical and implementation assistance to reduce waste • Motivate people to make waste reduction part of their everyday routines.

The Energy Council

The Energy Council was formed in Spring 2013 as a Joint Powers Agency to seek funding on behalf of its member agencies to develop and implement programs and policies that reduce energy demand, increase energy efficiency, advance the use of clean, efficient and renewable resources, and help create climate resilient communities. The Energy Council assists its members in strengthening staff capacity, providing technical expertise, and securing funds to implement local sustainable energy strategies.

Membership: All fifteen jurisdictions in Alameda County serve on the Board (the County of Alameda and the Cities of Alameda, Albany, Berkeley, Dublin, Emeryville, Fremont, Hayward, Livermore, Newark, Oakland, Piedmont, Pleasanton, San Leandro, Union City). The Board has been meeting since April 2013. An Energy Council Technical Advisory Group (TAG) comprised of staff representing participating jurisdictions meets monthly and provides input on program elements and coordinates energy program related activities within the County.

Program Priorities: as approved by the Energy Council for 2016-2018

- Single-Family Retrofits
- Multifamily Retrofits
- Innovative Financing
- Labeling and Recognition Programs
- Codes & Standards
- Integrated Services for Small/Medium Commercial Business
- Water/Energy Nexus
- Fuel Switching
- Grid Solutions

Funding: projects and staffing are funded from external grants and sources.

Saving Energy...

Residents

The Energy Council uses multiple approaches to encourage residents to save energy, including:

Home Upgrade: Energy Council conducts local outreach to promote the regional Home Upgrade rebate program.

Outreach strategies of the program have included:

- Energy Efficiency workshops throughout Alameda County
- Tabling at community events
- Neighborhood canvassing
- Open House events
- Partnerships with local non-profits and community based organizations
- Retailer events at local hardware and building material supplier stores
- Electronic newsletters and social media posts
- “Energy Challenge” campaigns in the cities of Dublin, Fremont, and San Leandro

Home Energy Analyzer: Energy Council implemented a residential behavioral pilot from 2013-2015. Home Energy Analyzer signed up Alameda County residents into an online tool (www.HomeEnergyAnalyzer.org) that analyzed smart meter energy use data. Based on this data, the program provided custom follow up: users with high heating and/or cooling loads were contacted by Home Upgrade Advisors to help connect users with Energy Upgrade California contractors, and users with above average plug load (non-HVAC uses) receive phone consultations to help them find no and low-cost savings strategies.

Contractor and REALTOR Engagement: Contractors and Realtors are highly effective industry channels for engaging homeowners. In partnership with the Bay Area Regional Energy Network (BayREN), Energy Council staff engages Home Upgrade Participating Contractors and specialty contractors through focus groups, phone interviews and one-on-one meetings. The Agency convenes periodic Contractor Forums to share best practices, encourage networking and recruit new contractors to participate in the program. These efforts provide technical training and lead generation support to contractors. In collaboration with local REALTORS, the Agency has developed a new homeowner toolkit that is being piloted in 2016. Energy Council participates in local real estate industry events to increase awareness about energy efficiency and other sustainability programs in the County.

Home Energy Score: Energy Council has long promoted green labeling as a way to encourage green upgrades during real estate transactions. As an official Department of Energy Partner, the Agency offers Home Energy Score in the San Francisco Bay Area. Home Energy Score is a national, “miles-per-gallon” metric for single-family homes. The Bay Area Regional Energy Network subsidizes quality assurance and offers incentives for voluntary participation in the Home Energy Score program. In addition, the City of Berkeley passed a building energy savings ordinance requiring single-family homes to obtain Home Energy Scores at the time of sale.

Added Value for Green Homes: In 2012, the Agency and San Francisco Environment sponsored a University of California study that found a 6% premium for green labeled homes at time of sale. Energy Council convenes a statewide working group that promotes greater transparency and value for green and energy efficient homes during real estate transactions. Its activities include sponsoring professional training for real estate industry stakeholders, developing the information infrastructure to support “green” MLS listings, promoting the use of low-cost labels such as Home Energy Score, and identifying financing and incentive drivers.

Multifamily

The Energy Council has a strong focus on increasing energy efficiency in multifamily buildings:

Bay Area Multifamily Building Enhancements: Energy Council leads BayREN's popular multifamily rebate program for the 9 Bay Area counties. To date, the program has served over 48,000 units with no-cost energy consulting and paid incentives of \$750 per unit for 15,896 units across the Bay Area. Within Alameda County, the program has served over 10,000 units with consulting, and paid incentives for over 2,800 units. The program's innovative design and success at serving this hard-to-reach market have been noted in the industry, recently highlighted by ACEEE in a report on increasing participation in multifamily energy efficiency programs.

Bay Area Multifamily Capital Advance Program: Also through BayREN, Energy Council proposed an innovative co-financing product that can reduce the interest on a private loan by up to 50%. It launched in April 2014, has enrolled five participating lenders, and has completed three transactions issuing \$879,000 in program capital and leveraging \$1.3 million in private capital. The program has another \$1 million in capital and a pipeline of six new projects for 2016.

Professional Training: The Green Property Management Training for property owners and contractors has been delivered annually since 2012 and attracts participation from across the state. The trainings comply with the national Building Performance Institute curriculum, integrate other green management techniques, and assist professionals to obtain marketable certifications.

Statewide Leadership: The Energy Council staff chairs the statewide Home Retrofit Coordinating Committee's Multifamily Subcommittee (MF HERCC) and provides recommendations to the multifamily energy retrofit industry after thorough stakeholder engagement. The MF HERCC's reports have been influential in shaping the multifamily Energy Upgrade California program design statewide.

Businesses

The Energy Council offers targeted programs to increase energy efficiency in commercial buildings:

East Bay Energy Watch: Since 2012 Energy Council has supported the PG&E Local Government partnership through strategic planning, increasing staff capacity of participating jurisdictions, and promoting business participation in local energy efficiency programs. In 2016 Alameda and Contra Costa County jurisdictions voted for Energy Council to assume the role of Administrator of the partnership. This allows Energy Council to facilitate integrated planning and program implementation across multiple funding sources, including PG&E, BayREN, and other local initiatives.

Water Energy Nexus: Because water is used to generate energy, and energy is used to clean and transport water. The use of these two critical resources is intertwined. To address this nexus, the Energy Council supports the City of Hayward and East Bay Municipal Utility District with their Pay as You Save (PAYS) programs. PAYS is an on-water-bill financing program for water- and energy-efficiency measures, such as installing efficient toilets and sink aerators. Energy Council is also supporting BayREN-sponsored state legislation to expand the availability of on-water-bill financing.

Business Recognition and Assistance: The Energy Council has assisted member agencies in implementing strategies to help businesses reduce their energy use and associated GHG emissions including; recognition of green and energy-efficient businesses, assistance with energy benchmarking and promotion of existing financing programs. Assistance has included paid interns or consultants to provide staff support to jurisdictions.

Local Governments

The Energy Council supports its member agencies through the Agency's core Built Environment services and supplements it with external funding for targeted programs.

StopWaste's Built Environment services include:

Policy & Regulatory Support

- ▶ Assistance with climate change and resiliency planning
- ▶ Support for policies, reach codes and leadership standards that reduce waste, save energy and water, and mitigate climate change
- ▶ Engagement with state and federal agencies to influence and track regulations affecting our region's environmental sustainability

Project Implementation Assistance

- ▶ Technical assistance for construction and demolition (C&D) recycling, green capital improvement projects including zero net energy (ZNE) municipal buildings and carbon neutral municipal operations
- ▶ Grants and technical assistance for sustainable landscape design, construction and maintenance and use of locally produced compost and mulch

Professional Development Services

- ▶ Reimbursement for green professional development, including memberships, conferences, trainings and certifications

Energy Council has leveraged external funding to support the following activities:

Model Policies: StopWaste has long supported its member jurisdictions in adopting leading-edge policies, including construction and demolition, green building and Bay-Friendly landscaping ordinances. With Innovator Pilot grant funding, Energy Council analyzed the potential for Alameda County jurisdictions to adopt commercial energy benchmarking policies. With funding from BayREN, Energy Council supported the rollout of the Berkeley Energy Savings Ordinance (BESO) in 2015 and developed a toolkit for other jurisdictions to adopt Residential Assessment and Disclosure Ordinances.

Municipal ZNE: Energy Council developed and is implementing a Municipal Technical Assistance service through the BayREN Codes & Standards program. Specialized consulting assistance is available to assist local governments by conducting engineering and cost analysis for Zero Net Energy design and implementation of municipal facilities. The project will also support cities to lead by example by demonstrating ZNE ordinance feasibility in existing municipal buildings, and provide technical information to support development of tools and standards necessary for an enforceable ZNE reach code.

Climate Action Planning: The Energy Council assists member agencies with climate change mitigation and resiliency planning. It has supported member agencies with greenhouse gas (GHG) emissions inventories through data gathering, analysis, and reporting, including assisting cities that have signed onto the Compact of Mayors to update their inventories to the Global Protocol for Communities standard. Through regular sharing of lessons learned and best practices the Energy Council assists member agencies to develop GHG reduction strategies.

The Energy Council Technical Advisory Group is discussing strategies for deep decarbonization needed to meet the State and international GHG reduction goals for 2030 and 2050. These include innovative technological solutions such as electrification of fossil fuel energy uses (e.g. electric vehicles and air or ground source heat pumps) and solutions to support a clean and reliable grid, such as site- and community-scale energy storage, demand response, and resilient infrastructure. The Energy Council is helping member agencies navigate existing regulatory and technical barriers and define the role for local governments to support these technologies.