

Green Government: Profiles in Achievement

Alameda County

by Racquel Palmese

A bar graph of government sustainability activity in California would show Alameda County off the chart, colored bright green and flashing. It's not the only county in the state to undertake a wide range of energy efficiency, green building, and waste reduction programs – but Alameda County's concentrated efforts have led to a culture of environmental awareness and action. It's a culture that encourages innovation and rewards participation among the county's 9,000 employees.

hicles, wants to show other local governments and businesses that sustainability can easily be integrated into how they currently operate.

Carolyn Bloede, sustainability program manager, is often asked what lies behind the county's steady progress. "What we're doing today can't be done overnight," she says, "but it's really not all that complicated to get started. Some of the principles that have guided us are that you don't need a formal policy to start on the road to green and that you can do a lot within your current budget. Start with small


port services for all county agencies in owned and leased facilities, so it's a logical home base for green efforts. As part of the agency's business plan, GSA Director Aki Nakao has challenged all staff to incorporate sustainable practices in their operational activities.

Most recently, GSA oversaw the design and construction of the county's new Juvenile Justice Center (JJC) and produced a building that is 100 percent powered by renewable energy. The facility is designed to exceed the county's Green Building Ordinance, which was passed in 2003 and calls for all new county buildings to be certified by the US Green Building Council at the LEED Silver level. The JJC was designed to achieve the more stringent LEED Gold standard and to beat California's Title 24 energy code by 46 percent – within the initial project budget.

The building's energy efficient design was the result of years of implementing energy efficiency projects throughout the county. Matt Muniz, Energy Program Manager, came onboard 14 years ago, and immediately began retrofitting lighting and equipment. "Retrofitting detention centers gave us the biggest bang for our buck," says Muniz. "They are in operation 24 hours a day. Santa Rita Jail, an adult detention facility in Dublin, has about 4,000 inmates and 300 staff. It's like a small city, so the energy savings add up quickly."

Using these savings as well as grant funding, a large fuel cell cogeneration plant was installed at Santa Rita last year, the first megawatt-class fuel cell power plant in California. The jail's 1.2 megawatt rooftop solar power system, installed in 2002, is still the largest in the US.

The new Juvenile Justice Center's rooftop solar panels will generate 880 kilowatts of



Energy efficiency savings can add up quickly in large facilities and pay for renewable energy installations. Rooftop solar photovoltaic system on the Santa Rita Jail is the largest in the US.

Alameda County in the San Francisco East Bay is home to 1.5 million residents and 14 cities, including Berkeley and Oakland. The county government, with 160 facilities occupying 7 million square feet and a fleet of over 1,000 ve-

steps, and the policy will follow as you build momentum."

With a staff of 450 and an operating budget of \$135 million, the county's General Services Agency (GSA) provides maintenance and sup-

electricity: That's the equivalent of a power plant supplying more than 750 single-family homes, but without producing greenhouse gas emissions.

In total, the 4.2 megawatts of power generated onsite at 8 county facilities provides 20 percent of county electricity needs. "Our sustainability program has evolved from grassroots staff efforts that have percolated up to a policy level through leadership and support from both our agency director and our Board of Supervisors," says Muniz.

According to Nakao, "When staff understand the importance of delivering services in an environmentally friendly way, they come up with very creative solutions because they know best what the needs and opportunities are in their areas of expertise."

Herman Watkins, grounds maintenance supervisor, promoted a non-toxic solution to the fire safety requirement to keep grass short on steep, unmowable hillsides near county facilities. Rather than using herbicides and staff time applying them, the county rents herds of goats to graze hills near facilities in Dublin and San Leandro.

The county's fleet is another example. Years ago, Fleet Manager Tom Fung decided to reduce the environmental impact of the fleet by using re-refined oil. Today, the county uses 20 percent biodiesel to fuel its diesel vehicles, and three diesel vehicles have been converted to run on used vegetable oil from local restaurants, a free, clean-burning fuel that would otherwise be disposed of as waste. Under Fung's leadership, Alameda purchased its first gas-electric hybrid car in 2001, before most people knew what "hybrid vehicle" meant. Now the fleet has 64 hybrids.

Though Bloede is a relative newcomer to the GSA, coming from a business background, she fit right into the culture of personal initiative. One of her first projects was to complete a waste survey of 120 county dumpsters, focusing on what she calls "high opportunity facilities," such as jails and large office buildings.

"Santa Rita Jail serves 4.4 million meals a year," she explains. "We wanted to explore ways to deal with all the wet food waste." She

and her staff pulled on rubber boots and gloves and dug through the trash. "We weighed two tons of trash," she recalls, "from sopping beef stew to potatoes au gratin." As a result of this effort, GSA is now sending 1,400 tons of food waste offsite for composting.

Bloede says she and her staff learned a great deal by talking to field staff at each site. In the end, the County is saving over \$120,000 a year by "right-sizing" its garbage service. "People

Last year the county purchased over \$3 million in environmentally preferable products, from green-certified furniture to Energy Star vending machines. In addition, a county salvage operation allows for the internal reuse of 3,600 items a year, avoiding \$84,000 in purchases.

These lessons are applied to construction as well. Ninety-four percent of the JJC's construction waste was diverted from landfills. Recycling that much debris required creative



Good for the goats, good for the land. Goats replace herbicides on Alameda County hillsides.



Karen Cook (Right) and Carolyn Bloede sorted and weighed two tons of trash from Santa Rita Jail dumpsters to explore ways to deal with food waste from large facilities.

Photos courtesy Alameda County GSA.



don't think about their dumpsters," she says. "Are they too big? Do they really need to have pickup service every day?"

In 1989, the state passed AB 939, which called for a 50 percent reduction in the amount of trash being sent to landfills by the year 2000. The county passed a corresponding charter amendment, Measure D, which calls for a 75 percent diversion of materials from landfills by 2010, exceeding the state's mandate considerably. "Take a look in your garbage can," says Bloede, "and imagine what you'd do to keep 75 percent of what's in there from going to a landfill."

Measure D also requires purchasing products with recycled content in order to create a market for recyclables. "That's where we started," Bloede continues. "Now we're looking way beyond that. Of course, we buy recycled janitorial papers, but we're also buying Green Seal cleaners and transitioning to reusable microfiber cloths. You start thinking more broadly about how you can make the whole process sustainable versus just improving a product."

Purchasing staff has taken on the challenge:

thinking. A foundation of an older building on the site was ground up and used as roadbed, for example. "You reduce your cost because you're not trucking out old debris to the landfill and trucking in new roadbed," said Bloede. "It makes good sense, both financially and operationally."

As initiatives prove their financial and productivity benefits, Alameda County continues to respond to new environmental challenges. Ten Alameda County cities and the county itself are coordinating in an effort to address climate change and have joined the Cities for Climate Protection™ Campaign. The county will calculate current and potential greenhouse gas emissions reductions from programs including green building, waste reduction, employee commute alternatives, local green business certification, and sustainable master planning for unincorporated areas.

In Alameda County, the road to green is paved with bright ideas, ongoing support at all levels of government – and, of course, recycled construction debris. ♻️