



SONOMA COUNTY

Energy and Sustainability Summary

May 2011

Since 2001, the Sonoma County Board of Supervisors has taken action to reduce the County's carbon footprint, lessen the County's impact on our environment and strengthen our economy. The County's ongoing commitment to climate protection flows from the Board's goal to reduce the County's greenhouse gas (GHG) emissions to 25% below 1990 levels by 2015 and continues to yield results.

In order to ensure every aspect of County operations is in this effort, the Board established the Energy and Sustainability Program in 2006 within the General Services Department. The Program exists as a resource to provide leadership and support to the County departments, regional partners, and the public in areas of energy and sustainability. The County has implemented a variety of initiatives touching all aspects of County operations.

Summary of 2010-11 Energy and Sustainability Programs:

- **Sonoma County Energy Watch Program (SCEW):** Local government partnership with PG&E. SCEW provides technical assistance, services, and rebates to municipalities, non-profits, small businesses, and special districts to decrease utility costs by reducing electrical and gas consumption. Since 2009, SCEW have helped our customers save 5,365,000 kWh/yr and 1504 tons of CO₂, enough to power 330 homes for a year. This has created an annual savings of approximately \$750,000 each year.
- **Sonoma County Energy Independence Program (SCEIP):** Sonoma County's Property Assessed Clean Energy (PACE) program, the leading PACE program in the nation, provides financing paid back through the property tax system and enables property owners to make responsible and affordable energy improvements, stimulates the local economy, continues to create green jobs, and improves home values.
 - Over 1,400 projects completed since March 2009;
 - Over \$44 million disbursed for efficiency upgrades;
 - Over 530 job-years created/retained, 55 of which are in installation of the upgrades;
 - Over 5 MW of solar PV financed through the program;
 - Over 3,200 tons reduction in greenhouse gas emissions annually
- **Climate Protection Action Plan (CPAP) 2010:** An audacious plan started to see by 2010 a 20% reduction in CO₂ emissions below the year 2000. The County has successfully achieved this goal by meeting and exceeding GHG emissions reduction goals in County buildings, fleet, and employee commute. The CPAP has spawned many projects including the:
 - **Comprehensive Energy Project:** Cash neutral from day one, this project will reduce utility bills by 33%, \$1.6 million per year, with a savings of \$38 million over the 25-year life of the project. 38 energy efficiency measures were completed in 24 county owned buildings including lighting retrofits in 20; HVAC upgrades in 4; a major upgrade of the central mechanical plant; water retrofits for the MADF and JJC saving over one million gallons of water per month; and installation of a 1.4 MW fuel cell cogeneration power plant.
 - 1.4 MW Fuel Cell meets approx 90% of the County center's electricity needs
 - Generates over 10,000 kWh/year
 - Produces 45 billion BTU's per year
 - Reduction of GHG emissions by 69% as compared to power from the Grid.
 - Designated "Ultra Clean" by CA Air Resources Board (CARB)
 - **Juvenile Justice Center (JJC) Photovoltaic Solar Array:** 750 kW solar array provides 80% of the electric power for the JJC.
 - 3,190 American made solar panels installed (both roof and ground mounted)

- Designed to generate more than 1.1 M kWh per year and save the County about \$137,000 per year
 - **Greening our Fleet** – The County is converting its vehicle fleet to electrical and hybrid vehicles. In addition, we are installing a vehicle charging station infrastructure including 12 EV charging stations. We have 9 plug-in vehicles and over 200 hybrids.
- **Composting Program** at detention facilities: first “vermiculture” composting program in a detention facility in the state. 1,200 pounds of food waste per month being diverted from the waste stream at MADF and NCDF kitchens. This program is located at NCDF and is managed as part of the jail industries program with a potential benefit of reducing inmate recidivism as they learn how to be “green”.
- **Utility Management** - Energy and Sustainability is responsible for the management of the County utility budget (est.5 million dollars), administration of programs to reduce these costs with sustainable results, monitoring energy efficiency measures performed on County facilities to ensure performance goals are reached and anticipated reductions are met.
- Seeking and winning innovative funding solutions for energy efficiency measures, new technology, and pilot energy programs.
 - **American Recovery and Reinvestment Act (ARRA) Energy Grants** - \$1,981,200:
 - **Energy Efficiency Community Block Grant** funding administration of 5 projects: over \$900,000 for energy projects on county buildings with Fac-ops employees completing the majority of the work (internal job retention); partial funding for the JJC solar array; funding for the installation of 14 EV charging stations; xeriscaping at Veterans buildings; community scale building retrofit planning program – PRMD’s two tier building code refinement projects, and financial support for the RCPA regional plan.
 - **California Energy Commission Energy Upgrade California funding** \$3,000,000:
 - For replication and enhancement of SCEIP program, and integration of the Energy Upgrade California elements into the SCIP program for expansion.

Awards:

- **Beacon Award** from the Institute for Local Government’s California Climate Action Network (CCAN), 4/22/2011, Sonoma County’s formal letter of acceptance into the Beacon Award Program: Local Leadership Toward Solving Climate Change. The Beacon Award recognizes and celebrates cities and counties that reduce greenhouse gas emissions and energy use; adopt policies and programs to address climate change; and promote sustainability.
- **Energy and Environmental Design Leadership Award**, 11/11/2010, Award is first for a County building and highlights County’s commitment to Sustainability. On August 23rd, Sonoma County’s Valley of the Moon Children’s Home Phase 3 Addition was awarded Silver Certification in Leadership in Energy and Environmental Design (LEED) by the United States Green Building Council. This award reflects the first county building in Sonoma County to achieve such status and demonstrates the County’s ongoing leadership in sustainability.
- **Green Leadership Award - Climate Change Category**, 3/17/2010, the Sonoma County Energy Independence Program (SCEIP) has been honored for its outstanding efforts to reduce greenhouse gas emissions through the innovative energy and water retrofit program. This award was presented at the 4th Annual Green California Summit held on Tuesday, March 16, in Sacramento.