

# HERE'S TO THE CALIFORNIANS WHO RECOGNIZE THAT PROTECTING THE ENVIRONMENT DOESN'T COME AT A COST, BUT A SAVINGS.



As a state, we saved an estimated 4 billion kilowatt-hours (kWh) this year — enough to power more than 650,000 homes in your community. The following are just a few organizations that have played an important role in helping us all use less energy. They designed the tools and technologies that make our everyday appliances, equipment and operations more efficient, produce fewer emissions and allow for more reliable power. What's more, their innovations let the rest of us spend our money where it counts — toward resources for our schools, our families and our businesses — rather than on energy bills. We thank them for making it easier to make saving energy a way of life!

**Winesecrets introduces energy-saving technologies for California's wineries.** Its Selective Tartrate Removal System (STARS) eliminates the need for refrigeration and reheating during tartrate removal, resulting in a 95% electricity reduction for this process. With support from utilities and the California Energy Commission, Winesecrets is demonstrating STARS to the wine industry. If adopted by all California wineries, STARS could save 24 million kWh each year. Winesecrets also has developed low-energy processes that reduce wine pH levels.

**Owens Corning saved more than 10.5 million kWh at its 2,000,000-sq.-ft. Santa Clara manufacturing facility.** After a plant-wide energy audit, the company worked with its utility and the Department of Energy to install state-of-the-art technologies that reduce horsepower requirements for its manufacturing processes. Owens Corning also upgraded furnace insulation. The company's insulation products contribute minimal emissions to indoor environments, and can reduce heating or cooling costs by 30% annually.

**Carmanah Technologies, Inc.'s light-emitting diode (LED) signs require no maintenance** and consume up to 90% less energy than fluorescent or neon signs. The company also produces solar-powered LED lights, which are simple to install, require no energy from the grid and need little maintenance or servicing. Carmanah's LEDs have a lifetime of up to 100,000 hours — 20 times as long as incandescent lights and twice as long as fluorescent lights.

**Davis Energy Group (DEG) developed two air-conditioning technologies designed to save energy and trim utility bills.** "NightBreeze" combines conventional heating/cooling equipment and advanced predictive controls to automatically ventilate homes at night. Testing showed that cooling costs dropped as much as 65% and that compressor-based cooling was eliminated in some climates. "OASys" uses a novel heat exchanger to cool air with far less humidity than conventional evaporative coolers, saving 90% of total energy use and 80% of peak demand.

**Dust Networks provides reliable, low-power wireless mesh networking systems** for enterprise-class monitoring and control applications. Using SmartMesh-XR-based monitoring solutions, a typical building can reduce energy and operational costs as much as 20%. With SmartMesh-XR wireless networking systems, installation and commissioning time of energy management systems can be reduced from weeks to hours, compared to hard-wired systems, making energy management systems more economical.

**General Electric (GE) launched "Ecomagination" in 2005** and, by 2012, plans to double investment in clean technology research, introduce more energy-smart products and improve energy use 30% in its facilities. GE Sensing in Fremont is expected to reduce electricity use by approximately 20% and natural gas consumption 81%, saving an estimated \$164,000 annually through optimization of the heating, ventilating and air conditioning (HVAC) system. Utility cost savings and contractor financing funded the project, which is expected to achieve payback in about one year.

**Calpine Corp. and the City of Santa Rosa partnered on a unique water pipeline that contributes 85,000 kW** to California's renewable energy supplies, or enough electricity to power 85,000 homes. Each day, the pipeline carries 11 million gallons of recycled water to recharge The Geysers, the world's largest geothermal operation, which accounts for one-third of all green power produced in state. Before the project, excess recycled water was often discharged into the Russian River.

**The California Lighting Technology Center (CLTC) specializes in developing energy-efficient lighting technologies** that are affordable for the average consumer. CLTC's new "California Kitchen Lighting System" offers homebuilders and homeowners an easy-to-install compact fluorescent lighting (CFL)-based system that is 75% more efficient than comparable incandescent lighting. The CLTC system effectively overcomes two limitations of recessed CFL lights — higher installation costs and heat buildup — by using fewer ballasts and incorporating adequate thermal protection.

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To learn more about these and other leaders, visit [www.FYPower.org](http://www.FYPower.org) where you will also find energy-saving tips, incentive information, energy-efficient product information and more to help you save energy, save money and help protect the environment.

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