



Berkeley Climate Action Plan: Tracking our Progress Building Energy Use – California Youth Energy Services



Goal: Enhance energy services & standards and reduce costs of energy upgrades for existing residential properties

Performance metric: Annual energy saved by the California Youth Energy Services program

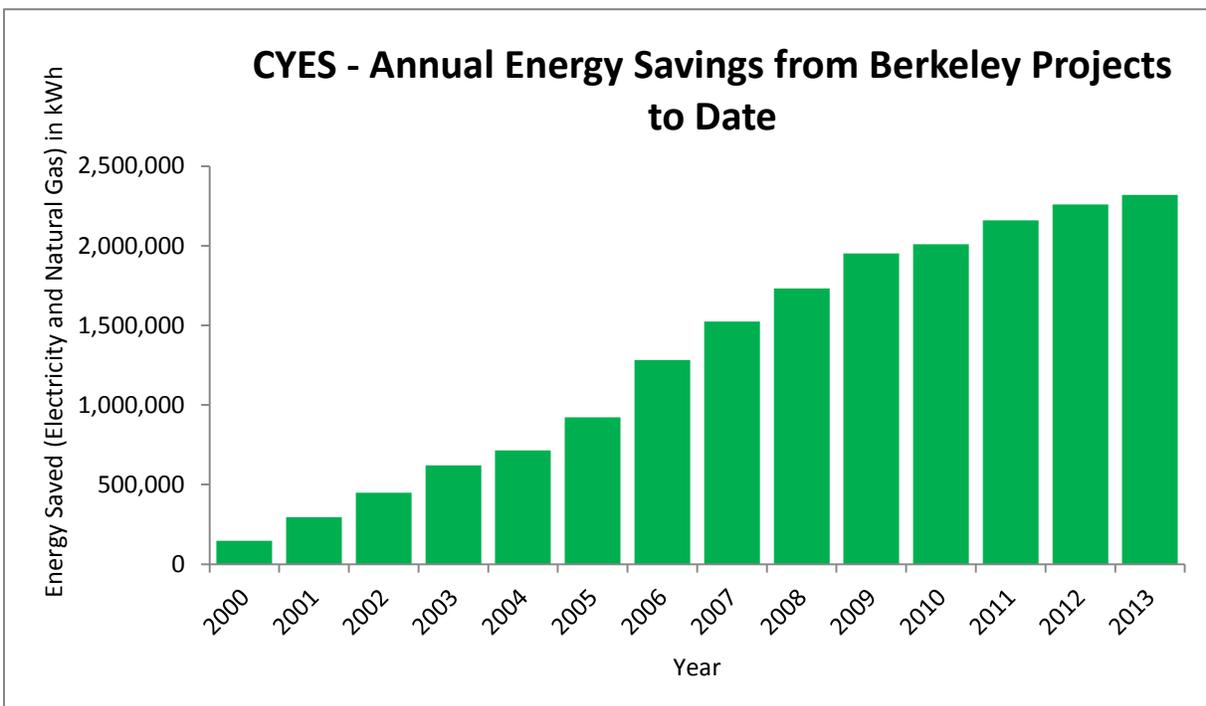
Target: The California Youth Energy Services (CYES) program, offered by the Berkeley non-profit [Rising Sun Energy Center](#), works to build green jobs for youth and promote energy efficiency in the residential sector. CYES outcomes contribute to efforts to achieve Berkeley's target of reducing community-wide building energy use-related greenhouse gas emissions 33% (2% per year) below 2000 levels by 2020.



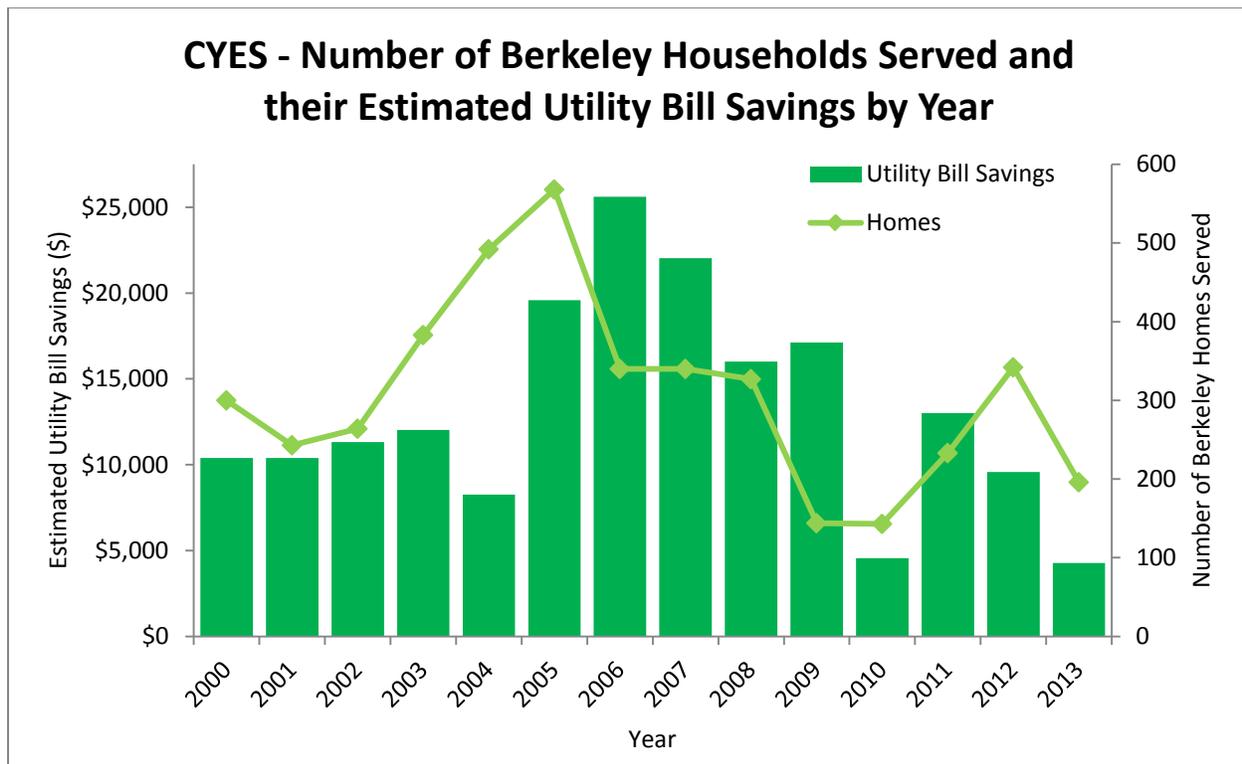
Status: CYES hires and trains youth (ages 15 to 22) to provide free energy and water efficiency services to households across the Bay Area. The youth conduct "green house calls" at which they do a basic energy and water efficiency assessment; install free energy and water-saving devices such as CFLs, clotheslines, and faucet aerators; and provide personalized recommendations for deeper energy and water savings.

In Berkeley alone, CYES trained 230 youth who conducted 4,315 green house calls between 2000 and 2013. The estimated annual savings on energy bills across all Berkeley households served by CYES exceeds \$184,000. The corresponding annual energy savings by these households is nearly 2.3 million kWh (including electricity and natural gas savings). The impact of these energy savings translates to an annual reduction of approximately 1,041 metric tons of GHG emissions, the equivalent of taking about 102 passenger vehicles off the road.

CYES trained 7 youth and served 196 Berkeley houses and apartments in 2013, resulting in 26,405 kWh of electricity and 1,103 therms of natural gas saved



CYES - Number of Berkeley Households Served and their Estimated Utility Bill Savings by Year



Why is this metric important?

CYES provides free energy and water efficiency services to the community, with a focus on hard-to-reach households. It can be utilized by renters (without need for landlord notification) and owners. The program, paid for by a surcharge on utility bills with additional funding from the local water district (EBMUD) and city governments, provides education and technical assistance to residents that may ultimately result in further and more long-term energy savings than just the free equipment installed during the green house calls. Rising Sun Energy Center also provides green jobs training to youth and adults who face barriers to employment. These training and employment programs prepare participants for careers in the energy efficiency sector.

Resources and assistance for community members

Rising Sun Energy Center (www.risingsunenergy.org) offers green training programs for youth and adults, including the California Youth Energy Services program that provides green house calls with free energy and water-saving equipment and technical assistance for residents of Alameda, Contra Costa, and Marin Counties.

Energy Upgrade California (www.energyupgradeca.org) is a one-stop-shop for California residents looking to make home improvement projects that lower energy use and conserve water. Rebate and incentive information is tailored by county.

Data sources and technical notes: Raw data on numbers of Berkeley youth served, homes serviced, electricity and natural gas saved, and the estimated utility bill savings due to the CYES program were provided by Rising Sun Energy Center. The utility bill savings assumed an average rate of \$0.12 per kWh and \$1 per therm. Conversion to a unified energy savings (in kWh) was done by the City of Berkeley, Office of Energy and Sustainable Development. Calculations of GHG emissions reduced were also made by this Office, using electricity and natural gas emissions factors provided by PG&E.

Tracking our progress: Review Climate Action Plan performance metrics at www.cityofberkeley.info/climate