Berkeley Climate Action Plan: Tracking our Progress
Building Energy Use – Solar PV

Goal: Increase residential and commercial renewable energy use

Performance metric: Annual solar photovoltaic (PV) installations

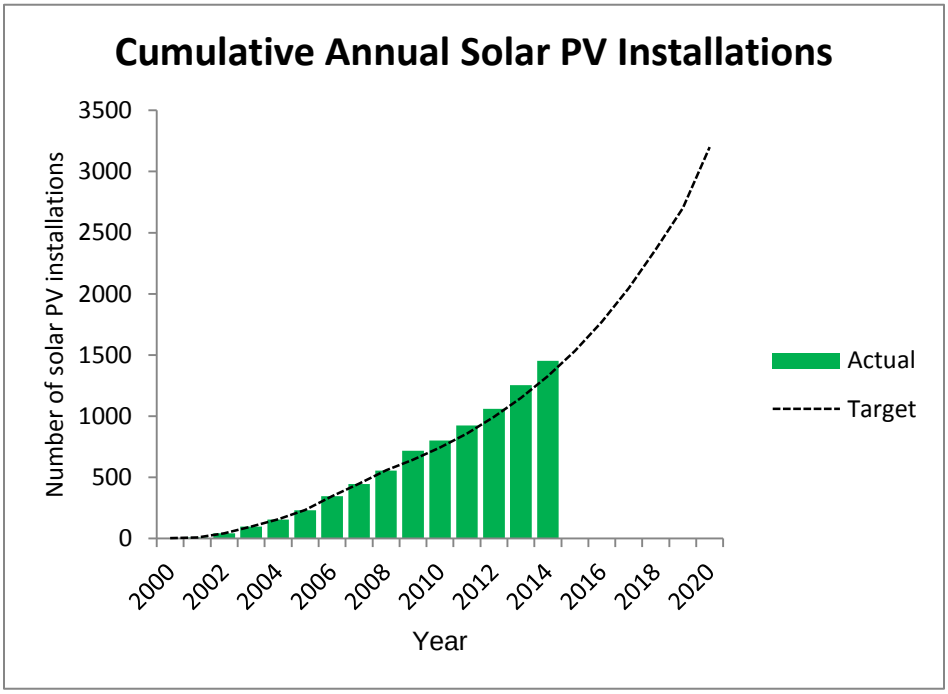
Target: Achieve a cumulative total of 3,200 solar PV systems installed between 2000 and 2020 at an average system size of 3.75 kW.

This target translates to an estimated 19 Gigawatt Hours (GWh) of clean solar electricity produced in Berkeley annually by 2020. The cumulative annual energy bill savings would be an estimated $2.5 million (at current electricity prices) by 2020. Annual greenhouse gas (GHG) reductions due to solar PV would be an estimated 9,700 tons.

Status: 1,452 solar PV systems were installed between 2000 and 2014, with an average system size of 4.21 kW. The City is currently at 45% of its 2020 target of 3,200 installations.

Annual utility bill savings from PV installations to date are approximately $1,306,000. These installations have a cumulative capacity of 6,115 kW and produce 10 million KWh of electricity per year. Existing solar PV installations offset over 5,000 metric tons of GHG emissions annually.

According to a 2009 NorCal Solar report, on a per capita basis, Berkeley has the highest number of solar PV installations of any large city in northern California.



Why is this metric important?
Because increased renewable energy use is an important component of achieving our climate action goals, it is important to monitor solar PV installations over time. Monitoring and reporting on this metric helps the community to gauge the efficacy of services designed to increase solar PV uptake. The City also tracks metrics such as cumulative GHG reductions from solar PV, cumulative utility bill savings from solar PV and annual kW of solar PV installed.

Resources and assistance for community members
SmartSolar (http://ebenergy.org/smart-solar-program) Provides free, independent energy education and site-specific project advice to help Berkeley residents and businesses go solar.

Berkeley Solar Map (www.CityofBerkeley.info/solarmap) An interactive tool for viewing locations of existing solar installations in Berkeley. It also allows one to calculate the benefits of going solar by determining the potential size and cost for solar PV or solar thermal on any rooftop within the City of Berkeley.

Data sources and technical notes
Solar installation data is provided by PG&E.

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