

# San Francisco Energy Efficiency Program Descriptions and Budgets

Program	Summary	Budget	Financing
<b>Energy Efficiency Services Division: San Francisco Public Utilities Commission</b>			
Municipal	Energy Efficiency team has helped City departments enhance energy performance in San Francisco’s municipal facilities building-by-building. Services include energy audits of existing buildings to identify savings opportunities, energy retrofits performed by specialized contractors, Green Building commissioning and design assistance for construction and renovation projects and energy performance benchmarking for San Francisco’s municipal buildings.	<b>\$1 Million</b>	No
<b>Shared Savings Program: Partnership between SF Unified School District and SF Public Utilities Commission</b>			
Municipal	Schools that can reduce their utility bill by 5% or more compared to their baseline are rewarded with 50% of those savings to use however they wish at their school. Expanded from 30 school sites in FY 2015 to 75 school sites in FY 2017.	<b>\$75,607</b> (FY 2015)	No
<b>Bay Area Regional Energy Network (BayREN): SF Department of the Environment on behalf of the Bay Area Association of Governments</b>			
Single Family	Home Upgrade is an Energy Upgrade California® program specifically for Bay Area homeowners and implemented by local county governments. Home Upgrade is available to homeowners in the all nine (9) Bay Area counties.  Home Upgrade helps homeowners identify energy efficiency improvements through a Home Advisor. Home Advisor’s assist homeowners in creating an energy efficiency improvement plan to tune up homes to operate as efficiently as possible.	\$69,658	

	<p>Rebates and incentives are available for home improvements including air and duct sealing; attic insulation; high-efficiency furnaces, cooling systems, water systems; wall insulation; and more.</p> <p>SF Environment’s primary responsibility is to market Home Upgrade to the City’s single-family homeowners (ex. no cost workshops, social media).</p>		
Multifamily	<p>Energy Upgrade California in San Francisco offers \$750 per unit in rebate to help multifamily property owners (5+ units) lower the cost of energy efficiency upgrades and provides the support, advice and technical assistance needed to implement upgrade improvements. This program gives owners the flexibility to choose their own installation contractors and receive the rebate once upgrades are completed.</p>	\$375,600	Yes
PACE: GreenFinanceSF	<p>With GreenFinanceSF, property owners receive funding for energy efficiency, renewable energy, electric vehicle charging equipment, energy storage and water efficiency improvements and repay the financed amount on their property tax bill over the course of up to 25 years.</p>	\$58,200	Yes
PAYS	<p>The BayREN PAYS® (Pay As You Save®) program is a joint effort of Bay Area cities and counties and their water agencies to partner in the implementation of a unique on-bill program that allows municipal water utility customers to pay for efficiency improvements through a monthly charge attached to their meter, with no up-front costs and the assurance that their utility bill savings will exceed the program charge.</p> <p>SF Environment’s primary responsibility is to coordinate with the SFPUC and to participate in region-wide activity.</p>	\$5,800	Yes
Codes and Standards	<p>The Codes and Standards program promotes an integrated, measurement-driven management process for enhancing energy-code compliance. SF Environment achieves this objective by hosting regional forums and workshops for stakeholders, such as building inspectors, consultants, designers, and contractors.</p>	\$32,000	
ZNE Plan	<p>Research the feasibility of Zero Net Energy elements in building codes.</p>	\$5,000	
<b>Total</b>		<b>\$546,258</b>	
<b>San Francisco Energy Watch: San Francisco Department of the Environment on behalf of Pacific Gas and Electric</b>			
Administration	<p>Implement activities to continue compliance with contractual goals, objectives, conditions and terms as described in the current Implementation Plan. Also, prepare and plan for next program cycle based on measured progress and forecasts.</p>	\$225,000	

SER	<p>Strategic Energy Resources (SER) is unique to Government and Community Partnerships (via PG&amp;E) to fund specific non-resource expansion activities as approved by the California Public Utilities Commission (CPUC). Non-resource activities are those without a direct, claimable energy savings equivalent</p> <p>SER activities are meant to compliment but not duplicate administrative, marketing, and direct implementation activities such as SF Energy Watch. Current examples of approved SER projects include:</p> <p><b>Revolving Microloan Fund for Small Business</b>– The SF Environment Small Business EE Microloan Program (microloans) is a pilot program designed to enhance current energy efficiency program offerings by assisting the City’s small business owners to reduce energy use while lowering their operating costs through energy-saving upgrades. Together, SF Environment and Mission Asset Fund (MAF) are using funds from PG&amp;E, the San Francisco Carbon Fund, and other sources to seed the microloans. The microloans will be used to help businesses pay for the co-pay (or net payment, less incentives) that the business must contribute to complete a SF Energy Watch project. Borrower repayments are expected to be less than \$150 per month for the maximum term of 18-months at 0% interest. Staff from SF Environment, including the SF Energy Watch team, serve as program administrators. MAF serves as the lending agent.</p> <p><b>Comprehensive Maintenance Program for SMB in Food &amp; Beverage Sector</b> – SF Energy Watch is serving forty (40) small businesses by helping them learn the importance and value of equipment maintenance, analyze recent energy usage data (up to 24 months). Through this project, SF Energy Watch is conducting surveys to gain more insight into existing maintenance practices, if any, and coordinate with a licensed refrigeration contractor to conduct comprehensive equipment evaluations.</p> <p><b>Investigating and Improving the Distribution of Energy Performance Outcomes from the Existing Commercial Building Ordinance</b> – SF Energy Watch is working with other areas of the SF Environment Energy Team to determine the effectiveness of benchmarking and energy auditing on energy savings for buildings subject to the requirements of the City’s Existing Commercial Building Benchmarking Ordinance.</p>	\$900,000	Yes
Marketing	SF Energy Watch provides direct outreach and support to businesses and through programs such as Step Up Power Down to help identify and implement energy upgrade improvements.	\$325,000	
Implementation	SF Energy Watch provides comprehensive energy assessments, technical assistance and financial incentives for energy upgrades to qualifying commercial and multifamily building owners as well as small and medium size business owners.	\$2,480,000	
Incentives	SF Energy Watch provides incentives to all customers receiving PG&E power in San Francisco, including enhanced incentives to the small business/hard to reach sectors.	\$3,000,000	
<b>Total</b>		<b>\$6,930,000</b>	

**Energy Savings Assistance Program (ESAP): Pacific Gas and Electric**

Residential	Assists income-qualified single-family, multi-family and mobile home owners and renters to reduce their energy use and costs.	\$2,100,000 Estimated for 2016.	No
-------------	---	---------------------------------------	----

**Weatherization Assistance Program: San Francisco Economic Opportunity Council**

Residential	The Weatherization Program provides free weatherization services to improve the energy efficiency of homes, including attic insulation, weather stripping, minor housing repairs, and related energy conservation measures.
-------------	---

Low income energy assistance information available at: <http://www.liheapch.acf.hhs.gov/profiles/California.htm>

RECO – Residential Energy Conservation Ordinance: time of sale ordinance for all residential buildings. Requires some retrofits.

CLEO – Commercial Lighting Efficiency Ordinance: requires fluorescent fixture conversion to a more efficient technology.

ECBEBO – Existing Commercial Building Energy Benchmarking Ordinance: Requires benchmarking over 10,000 sqft and disclosure.

ESAP – Energy Saving Assistance Program for low-income

LIHEAP – Low Income Home Energy Assistance Program

WAP – Weatherization Assistance Program for low-income

CPUC – CA Public Utilities Commission

CAEEC – CA Energy Efficiency Coordinating Committee

CEC - CA Energy Commission

CAISO – CA Independent Systems Operator

CARB – CA Air Resources Board

CAEATFA – CA Alternative Energy and Advanced Transportation Financing Authority

ABAG – Association of Bay Area Governments

BayREN – Bay Regional Energy Network

BAAQMD – Bay Area Air Quality Management District

LGSEC – Local Government Sustainable Energy Coalition

## San Francisco Energy Efficiency Program Matrix

Market Sector	Market Quantity	City Policy	PG&E	SF Department of the Environment (SF Environment)	SFPUC (Public Owned Utility Only)	State	Federal
Single Family	124,041 units; 79,969 units in 2-4 unit buildings	RECO	ESAP, Appliance rebates, Advanced Home Upgrade, Home Upgrade	BayREN <ul style="list-style-type: none"> <li>Residential PACE</li> <li>BayREN Home Upgrade</li> </ul>	Residential LED Give-Away and Energy Education Program		\$500 tax credit
Single Family: Affordable (housing that is either rented or owned at prices affordable to households with low to moderate incomes)	TBD	RECO	ESAP	-	Program in development.	LIHEAP	WAP
Multifamily: Market RateMarket-Rate (≥5 units/bldg)	160,434 units	RECO	Rebates On-Bill Financing	<p>Since 2006, SF Energy Watch has installed 1,569 projects, resulting in 30,615 MWh saved, 4,356 gross peak kW (4.3 megawatts) saved, 1,504,659 therms saved and \$5,607,682 paid in incentives.</p> <p>Since 07/2013, the BayREN Multifamily Program has installed 59 projects (benefiting 4,064 units), 1,207 MWh saved and 145,123 therms-reduced.incentivesS</p>	Residential LED Give-Away and Energy Education Program		Tax credits

Multifamily: Affordable (housing that is either rented or owned at prices affordable to households with low to moderate incomes)	17,482 units (included in Multifamily above)		ESAP Rebates On-Bill Financing	Approximately 35% of all BayREN multifamily projects with completed energy assessments serve the affordable sector.	Residential LED Give-Away and Energy Education Program, other programs in development	LIHEAP	WAP
Small Business/Hard to Reach	SF OpenData: 169,514 business locations: non-profits, tenants, owner occupied, and virtual. Appx 8500 walk-in sites.	CLEO	Rebates: Unknown On-Bill Financing: Unknown	Since 2006, SF Energy Watch has installed 2,186 projects, resulting in 40,866 MWh saved, 6,741 gross peak kW (6.7 MW) saved, and \$5,282,695 paid in incentives.	Program in development		
Medium/Large Commercial	1,800 buildings	CLEO ECBEBO	Rebates Custom Retrofit (NRR) On-Bill Financing	SF Energy Watch has installed 3,743 projects, resulting in 110,092 MWh saved, 18,806 gross peak kW saved (18.8 MW), and \$12,980,215 paid in incentives.	New Construction Incentive Programs in development.		Tax credits
Municipal/ Schools	600 facilities	CLEO ECBEBO	Rebates On-Bill Financing	SF Energy Watch (provides technical assistance for natural gas projects only)	<ul style="list-style-type: none"> <li>• Job Order Contracting Direct Install Program</li> <li>• Commissioning and Design Review Program</li> <li>• Retro-Commissioning Services</li> </ul>	Prop 39	

**TABLE 1.****San Francisco Housing Stock by Building Type, 2010–2014**

Building Type	Single Family	2 to 4 Units	5 to 9 Units	10 to 19 Units	20 + Units	Total
2010 ACS5	123,951	79,774	37,088	37,656	93,496	<b>372,560*</b>
Net Added 2011–2014	59	134	61	319	6,464	<b>7,037</b>
<b>TOTAL</b>	<b>124,010</b>	<b>79,878</b>	<b>37,149</b>	<b>37,975</b>	<b>99,960</b>	<b>379,597</b>

Source: U.S. Census Bureau; Planning Department

\* This total includes other "housing" types that the Census Bureau counts, such as mobile homes, RVs, vans, and houseboats.