

Local Governments Leading by Example

BayREN Forum

September 26, 2017

Orinda CA

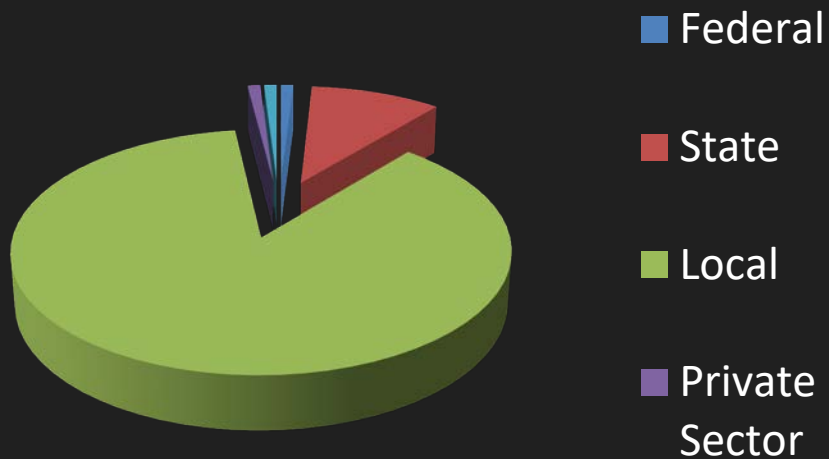
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Local Government is central to the conversation on Climate Change

Expectations of Addressing Climate Change



California's Energy Goals

- 2x savings from EE x 2030
- 50% renewable energy x 2030 (Brown), 100% by 2045 (De Leon)
- 100% ZNE residential new construction x 2020
- 100% ZNE commercial new construction x 2030
- 100% ZNE new construction of State-owned buildings x 2025
- 50% ZNE-retrofits of existing commercial buildings x 2030

CA EE Strategic Plan

VISION

By 2020, California's local governments will be leaders in using energy efficiency to reduce energy use and global warming emissions both in their own facilities and throughout their communities.

City of Fremont

- PV Carport at Police Station
- Managing energy use in city facilities and infrastructure
- Fire Station Micro-grid Demonstration Project

7 Habits of Highly Effective Municipal Sustainability Professionals

1. Be Thrifty
2. Be Opportunistic
3. Leverage Internal Support
4. Show Courage
5. Do the Heavy Lifting
6. Market, Market, Market
7. Be Patient and Persevere



City of Hayward



- Zero Net Energy Municipal Building Ordinance
- All buildings ZNE by 2025
- More renewable energy, more EE

Cities of Santa Cruz & Watsonville



- Revolving Carbon Funds
- Finances GHG-Mitigation
- Revenue streams = EE incentives, development fees, student fees



Local Government Energy Savings in PG&E EE Programs 2013-Present

- Invested \$75M
- \$31M Incentives
- Saved over...
 - 13 MW
 - 143 GWh
 - 1.6M Therms
- Lighting + HVAC = >75% of electric savings

Technology Family	kWh Savings	% kWh Savings	Therms Savigns	% Therms Savings
LIGHTING	98,512,718	56.5%	0	0.0%
HVAC	37,145,293	21.3%	2,382,374	54.1%
INDUSTRIAL SYSTEMS	13,939,827	8.0%	0	0.0%
PUMPS AND FANS	13,735,759	7.9%	0	0.0%
WHOLE BUILDING PROGRAM	6,471,905	3.7%	347,508	7.9%
APPLIANCES	1,043,219	0.6%	166,020	3.8%
MOTORS	945,005	0.5%	0	0.0%
FOOD SERVICE TECHNOLOGY	834,935	0.5%	40,670	0.9%
REFRIGERATION	524,797	0.3%	2,024	0.0%
AUDIT	513,330	0.3%	80,396	1.8%
ELECTRONICS AND IT	440,434	0.3%	0	0.0%
UNASSIGNED	136,654	0.1%	0	0.0%
BOILERS AND STEAM SYSTEMS	109,384	0.1%	1,383,751	31.4%
BUILDING ENVELOPE	14,288	0.0%	0	0.0%
Grand Total	174,367,548	100.0%	4,402,743	100.0%

Local Government Participation in PG&E EE Programs 2013-Present

176 Cities

40 Counties

40 Special Districts

7 Native American Communities

Statewide EE Collaborative (SEEC)

- ClearPath, online GHG inventory tracking tool
- Beacon Awards program
- SEEC Forum



<http://californiaseec.org/>



SEEC – A grain of sand in Local Governments' sustainability oyster

Local Government Energy-related Authorities

- Motivated, qualified FTE focused on sustainability and EE for a fraction of the true cost



<http://civicspark.lgc.org/>

Go Forth and Lead by Example!



The World is Watching...