Local Governments Leading by Example

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Orinda CA

Brendan Havenar-Daughton
B2H6@pge.com
Local Government is central to the conversation on Climate Change

Expectations of Addressing Climate Change

- Federal
- State
- Local
- Private Sector

What Do You Think?
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

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

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

http://californiaseec.org/
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...