

# Benchmarking & the Accidental Energy Manager

1

**City of El Cerrito**  
**Small Cities Climate Action Partnership**  
Statewide Local Government Energy Efficiency Forum  
July 27, 2011

## Statewide Local Government Energy Efficiency Forum Case Studies in Energy Benchmarking

### The Accidental Energy Manager?

- Staff in small cities where many hats
- New climate action initiatives require small cities tackle energy issues



Recycling, Clean Water Compliance, Planning Staff are often asked to take on energy management issues

2

Statewide Local Government Energy Efficiency Forum  
**Case Studies in Energy Benchmarking**

○ **Statewide Context – AB 1103**

- Non-residential building owners to disclose the EPA Portfolio Manager benchmark at the time of lease of sale.
- Compliance begins Jan. 2012
- Utilities to enable benchmarking by providing automatic monthly uploads for all commercial accounts.
- Portfolio Manager is a free energy management software

3

Statewide Local Government Energy Efficiency Forum  
**Case Studies in Energy Benchmarking**

○ **CA Energy Efficiency Strategic Plan**

- Local governments lead by example with their own facilities and energy usage practices.
- Examples of leadership
  - Establish benchmarks for all local govt buildings
  - Make energy efficiency gains of 20-40% by 2015
- Helps make benchmarking the norm
- Demonstrates worth of benchmarking

El Cerrito Climate Action Plan

4

## Statewide Local Government Energy Efficiency Forum Case Studies in Energy Benchmarking

### o **Small Cities Climate Action Partnership**

- 4 small cities combining resources
- Municipal Energy Management
- Climate Action Planning & Policy Development
- Residential and Commercial Rebates
- Peer Exchange & Continuity



El Cerrito Climate Action Plan

5

## Statewide Local Government Energy Efficiency Forum Case Studies in Energy Benchmarking

### o **Municipal Energy Management Plans**

- Create and Implement Energy Management Plans
  1. Benchmark the buildings in Portfolio Manager
  2. Get a snap shot of energy use throughout operations
  3. Diagnose the poor performing facilities through audits and retrofit proposals
  4. Assess other clean energy & energy efficiency opportunities
  5. Develop a multi-year implementation and financing plan

El Cerrito Climate Action Plan

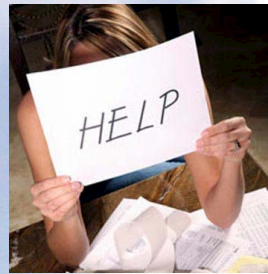
6



## Statewide Local Government Energy Efficiency Forum Case Studies in Energy Benchmarking

### o Portfolio Manager Data Input

- Utility Account #s
- SAID #s,
- Meter #s
- Square feet of facility
- % breakdown of different building types
- % of building conditioned
- Portfolio Manager definition of building types
- Number of employees
- Number of servers or UPS per server room
- Number of computers



7

## Statewide Local Government Energy Efficiency Forum Case Studies in Energy Benchmarking

### Yeah, but would I ever use Portfolio Manager?

Facility Summary: **City Hall**  
[How to Use this page?](#)  
 Building ID: 1776322  
 Level of Access: Building Data Administrator  
 Electric Distribution Utility: Pacific Gas & Electric Co (PG&E Corp)  
 Regional Power Grid: [WECG California](#)  
[Select my Power Generation Plant](#) to calculate my electric emissions rate  
 Electric Emissions Rate (kgCO<sub>2</sub>e/MBtu): 90.9 ([what is this?](#))  
[Generate a Statement of Energy Performance](#) for uses other than applying for the ENERGY STAR.

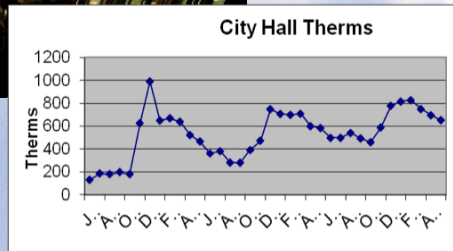
General Information	
Address: 10890 San Pablo Avenue, El Cerrito, CA 94530	
Year Built: 2008	
Property Type: Single Facility	
Baseline Rating: 50	Current Rating: 42
View Period Ending Dates	
Water Period Ending Dates Current: N/A Baseline: N/A	Energy Period Ending Dates Current: May 2011 Baseline: February 2010
Eligibility for the ENERGY STAR	
Not Eligible: Rating must be 75 or above	

Facility Performance						
Select View: Summary Energy Use						
12 Months Ending	Current Rating (1-100)	Current Site Energy Intensity (kBtu/Sq. Ft.)	Current Source Energy Intensity (kBtu/Sq. Ft.)	Change from Baseline: Energy Use Intensity (kBtu/Sq. Ft.)	Change from Baseline: Adjusted Energy Use Intensity (kBtu/Sq. Ft.)	Energy Use Alerts
May 2011	42	96.5	217.2	11.2	16.5	
February 2010	50	85.3	202.9	0.0	0.0	
Change	8	-11.2	-14.3	100%	100%	

REFRESH VIEW

8

## Statewide Local Government Energy Efficiency Forum Case Studies in Energy Benchmarking



9

## Statewide Local Government Energy Efficiency Forum Case Studies in Energy Benchmarking Setting Energy Reduction Targets

Portfolio Manager

ENERGY STAR PORTFOLIO MANAGER

Home > My Portfolio > City Hall > Set Energy Performance Target

**Set Energy Performance Target**

Portfolio Manager provides the ability to establish an energy performance target by either defining a target rating or a target reduction (%). The energy use and costs displayed reflect required target rating or percent reduction goal for this facility.

To establish a performance target, a **Baseline Period** must first be set.

Select "RECALCULATE" to refresh this screen after making any changes to target rating or percent reduction. Select "SAVE" to store the entered targets in Portfolio Manager.

Target (1-100 Rating)	Baseline Rating (1-100)	Baseline Energy Use (kBtu/year)	Target Energy Use (kBtu/year)	Energy Cost Savings (\$/year)	Target Reduction (%)
<input type="text" value="75"/>	50	1,424,072	1,099,193	\$9,946	<input type="text" value="23"/> %

CANCEL RECALCULATE SAVE

10

## Statewide Local Government Energy Efficiency Forum Case Studies in Energy Benchmarking

### ○ Pros of Portfolio Manager

- Free, unlimited utility data uploads
- Benchmarking based on constantly evolving database of buildings nationally
- Feeds into Energy Star Building Awards
- Monitors energy performance over time

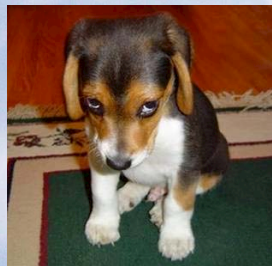


11

## Statewide Local Government Energy Efficiency Forum Case Studies in Energy Benchmarking

### ○ Cons of Portfolio Manager

- Not every building is rateable
- Fussy input, maybe not worth it for all energy accounts (street lights, etc)
- Not really good for managing/ budgeting energy costs



12

**Statewide Local Government Energy Efficiency Forum  
Case Studies in Energy Benchmarking**

**Thank you.**

[msanders@ci.el-cerrito.ca.us](mailto:msanders@ci.el-cerrito.ca.us)

El Cerrito Climate Action Plan