

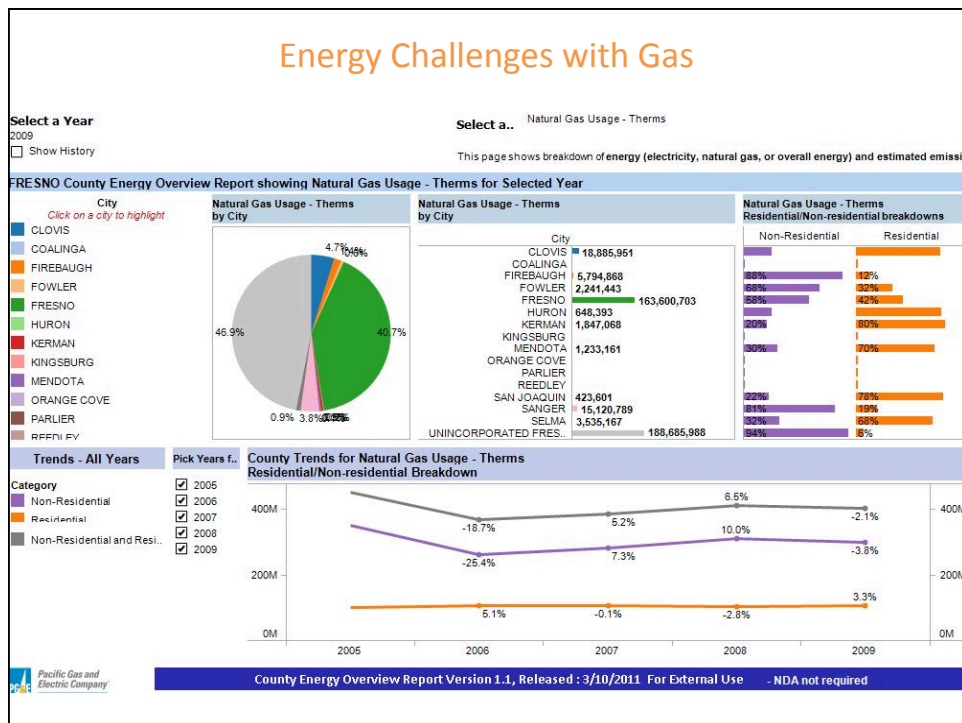
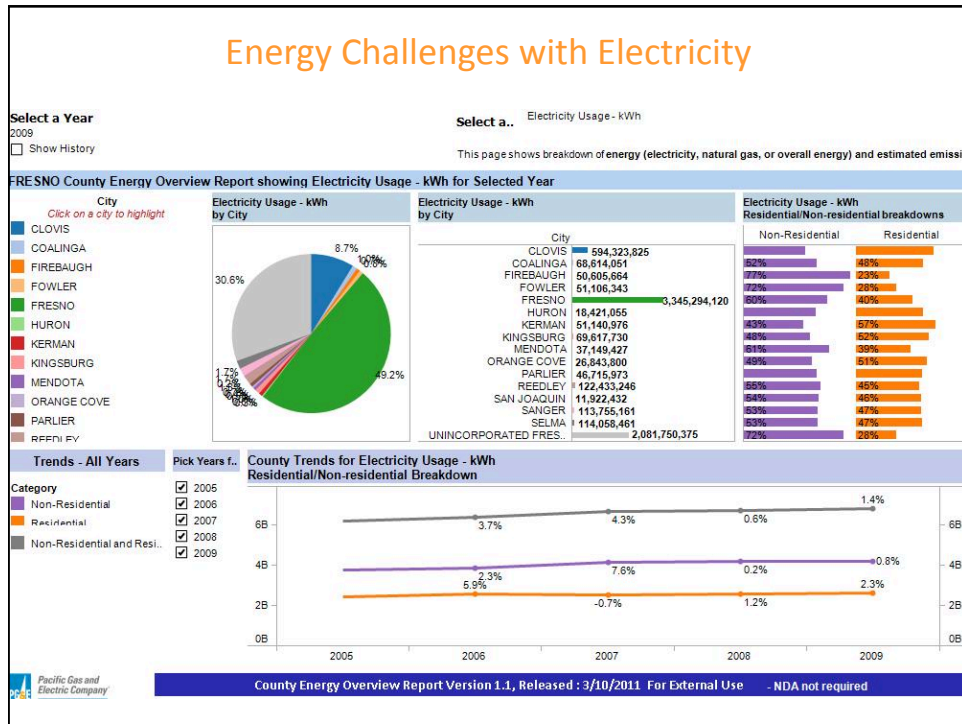
## **Fresno Regional Comprehensive Residential Retrofit Program Overview**

**By Joseph Oldham  
Sustainability Manager**



### **Program Partners**

- California Energy Commission
- Pacific Gas and Electric Company
- Ecology Action
- U.S. Department of Energy
- Local jurisdictions in Fresno and Kern Counties
- Local contractors
- Local and regional non-profits
- And many more...



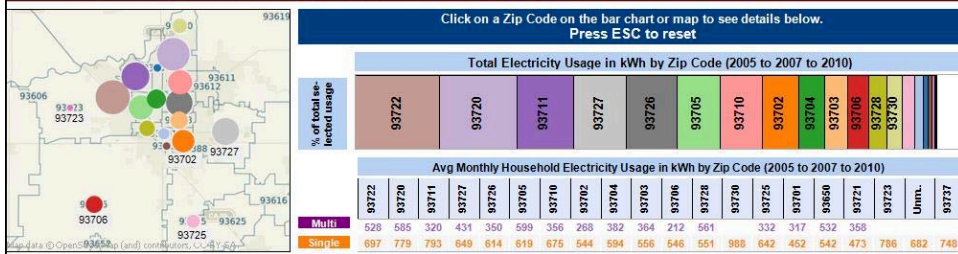
## Economic Impact

- In 2009 Fresno as a community spent over \$866 million on electricity and natural gas!
- Roughly 40% of that cost, or \$346 million, was spent by residential households.
- Lowering homeowner energy usage by 30% would add approx. \$104 million annually to the Fresno economy!!

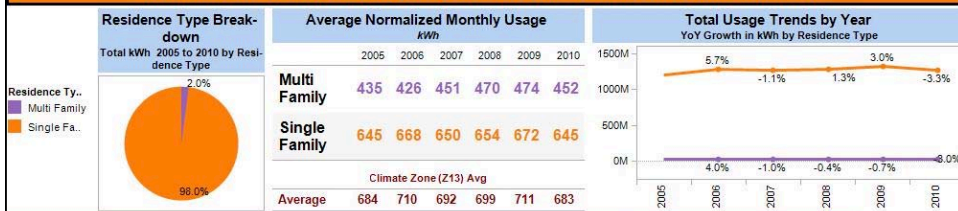
### Where Do We Start? Single Family Homes!

#### Incorporated City of FRESNO Residential Electricity Usage by Zip Code

Select Electricity, Natural Gas, or CO2 Emissions Electricity Usage

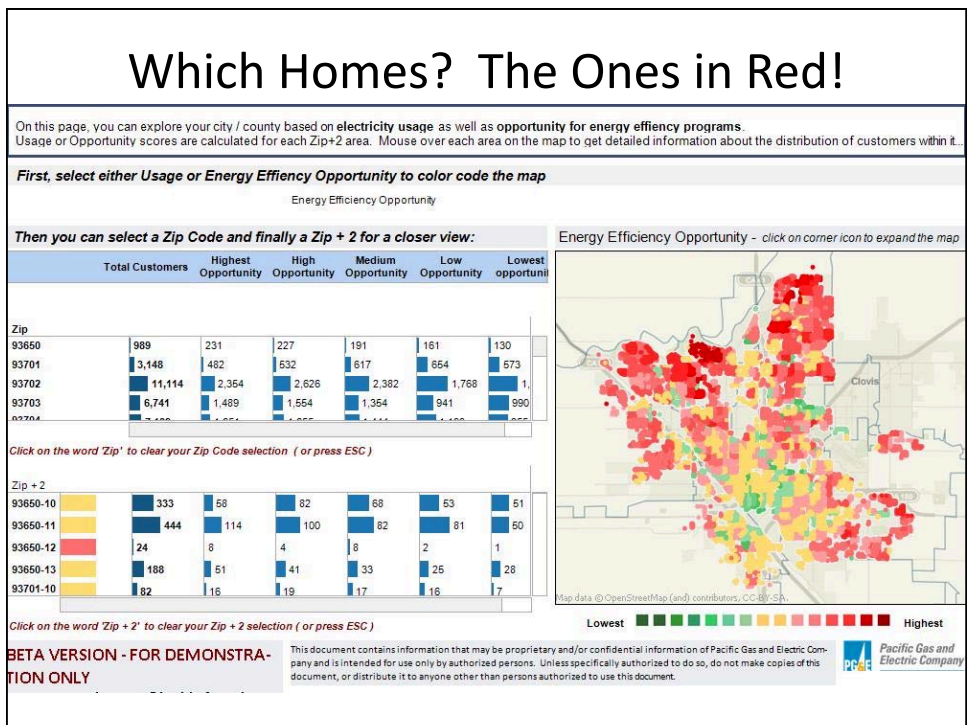
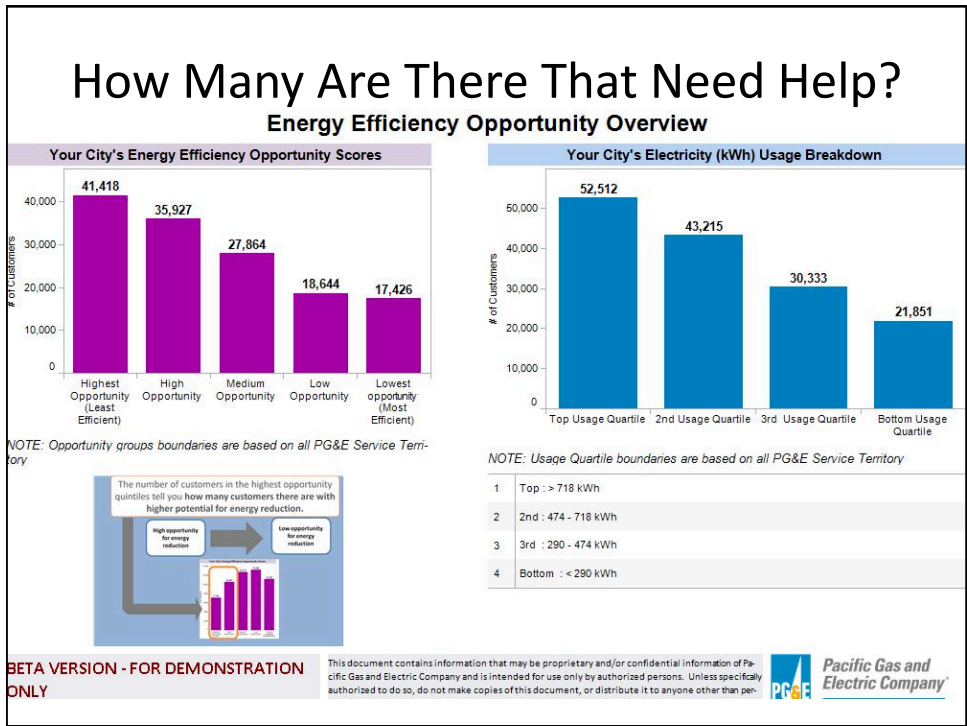


#### Residential Breakdown for Electricity Usage for 93650, 93701, 93702, 93703, 93704 and 15 more



City Residential Energy Overview v1.2, Released 05/02/2011







## Target Neighborhoods

On this page, you can explore your city / county based on electricity usage as well as opportunity for energy efficiency programs. Usage or Opportunity scores are calculated for each Zip+2 area. Mouse over each area on the map to get detailed information about the distribution of customers within it.

**First, select either Usage or Energy Efficiency Opportunity to color code the map**

Usage

**Then you can select a Zip Code and finally a Zip + 2 for a closer view:**

Usage - click on corner icon to expand the map

Zip	Total Customers	Top Usage Quartile	2nd Usage Quartile	3rd Usage Quartile	Bottom Usage Quar.
93650	989	280	289	245	174
93701	3,148	522	733	894	990
93702	11,114	2,729	3,406	2,941	2,025
93703	6,741	1,789	1,988	1,574	1,375
93704	3,100	800	750	600	550

Click on the word 'Zip' to clear your Zip Code selection ( or press ESC )

Zip + 2	Total Customers	Top Usage Quartile	2nd Usage Quartile	3rd Usage Quartile	Bottom Usage Quar.
93650-10	333	79	103	86	65
93650-11	444	131	129	110	74
93650-12	24	9	8	4	3
93650-13	188	61	49	46	32
93701-10	82	17	24	25	16

Click on the word 'Zip + 2' to clear your Zip + 2 selection ( or press ESC )

**BETA VERSION - FOR DEMONSTRATION ONLY**

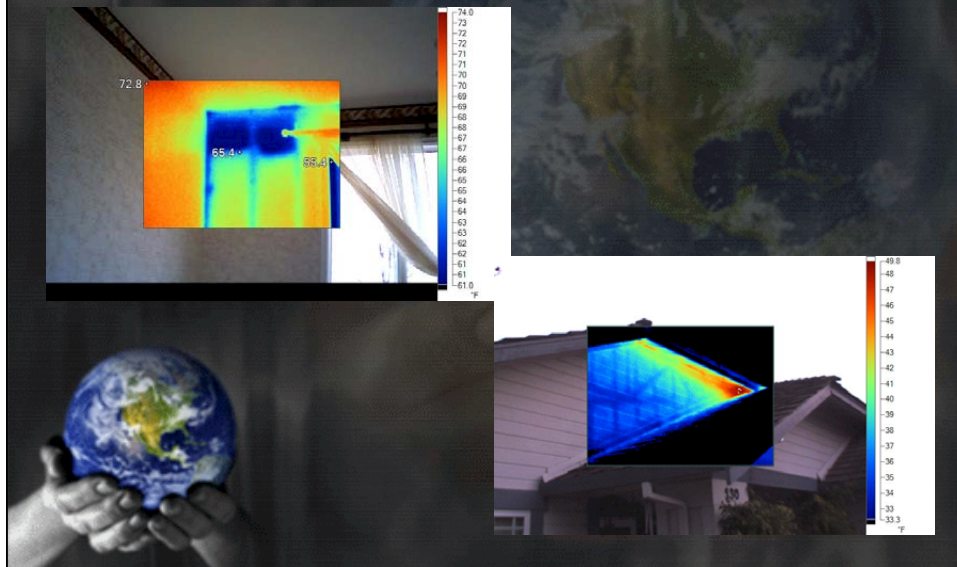
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Lowest ■ ■ ■ ■ ■ Highest

## Fresno Regional Comprehensive Residential Retrofit (FRCRR) Program Free Energy Surveys

- Program started July 2009 and was enhanced in March 2011 to include HERS II Whole House Rater analysis.
- Analysis includes thermal imaging profile, cost/benefit calculations, and rebate information
- Over 1,350 residential surveys completed to date, with 120 of those being HERS II.
- Program is designed to educate the public and create demand for energy efficiency contractor services.
- Program points homeowners to Energy Upgrade California website and resources.
- Program services all of Fresno and Kern Counties.

## Thermal Imaging Testing Continues to Be Popular



## What Do Homeowners Need to Invest in Energy Efficiency?

- Accurate and independent information about how efficient their homes are.
- Education about the value of energy efficiency improvements on their economic situation.
- Money, in the form of new financing programs with terms where homeowners can be cash-flow positive month 1.
- Rebates help, but financing options are still essential.
  - Poll of homeowners that received energy surveys indicated 55% preferred loans vs. 34% preferred rebates.





### FRCRR Program is Meeting Those Needs by:

- Offering free Energy Surveys for Fresno and Kern county residents.
- Extensive radio and print ad campaign.
- Promoting Energy Upgrade California and all other rebates that are available.
- Promoting the CHF loan program and working with local banks to encourage more financing options.



### Next Steps

- Plans are underway to hold Community Engagement meetings at community centers and local schools.
- Hold a Energy Efficiency Financing Workshop in August to educate local banks on how energy efficiency is an economic development and job generation tool.
- Continue efforts to develop a residential PACE financing program.
- **Educate, educate, educate!!!**



