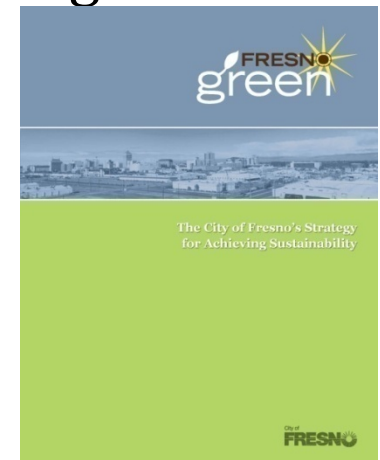


By Joseph Oldham
Sustainability Manager

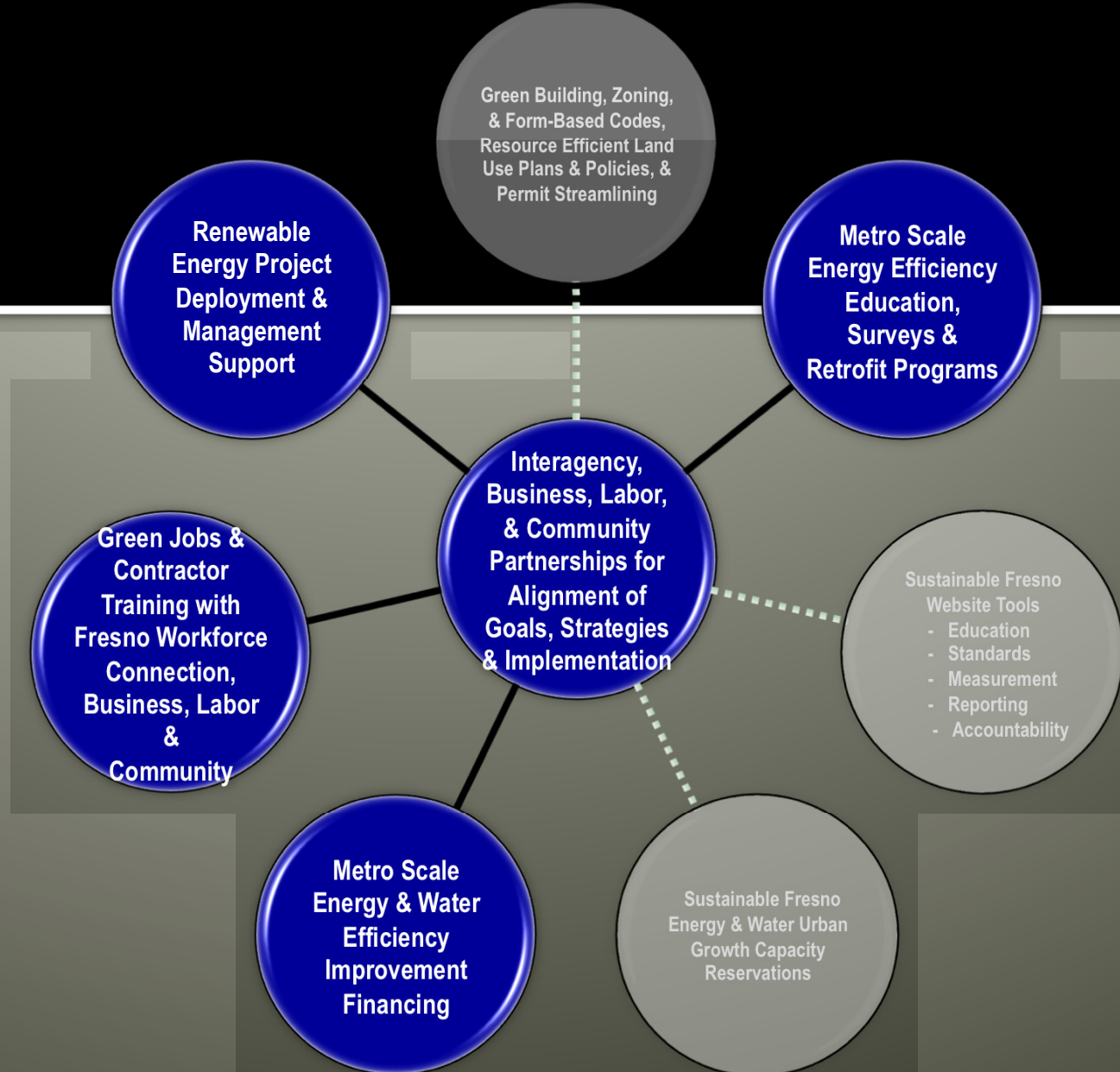
Sustainable Fresno Division Overview

Sustainable Fresno

- Built on Fresno Green; The City of Fresno Strategy for Achieving Sustainability accepted by City Council in May 2008.
- Established May 21, 2009 through adoption by Council of Resolution No. 2009-119.
- Initial program funding from U.S. Department of Energy EECBG with additional program work and funding from PG&E and the California Energy Commission.



Initial Sustainable Fresno Programs



The Core is Our Program Partners

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

Energy Challenges with Electricity

Select a Year

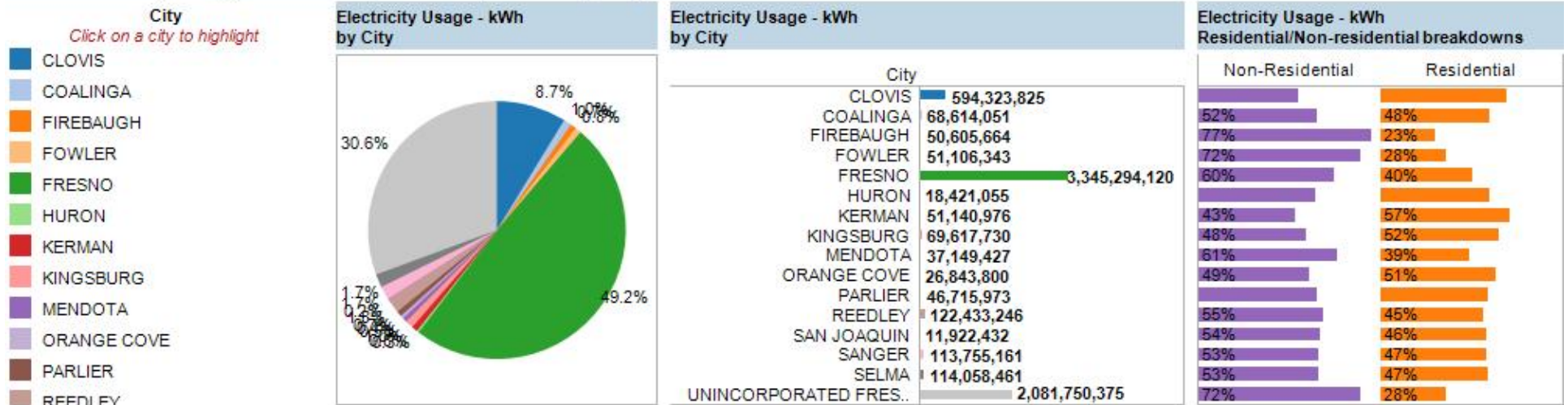
2009

Show History

Select a.. Electricity Usage - kWh

This page shows breakdown of energy (electricity, natural gas, or overall energy) and estimated emissi..

FRESNO County Energy Overview Report showing Electricity Usage - kWh for Selected Year



Trends - All Years

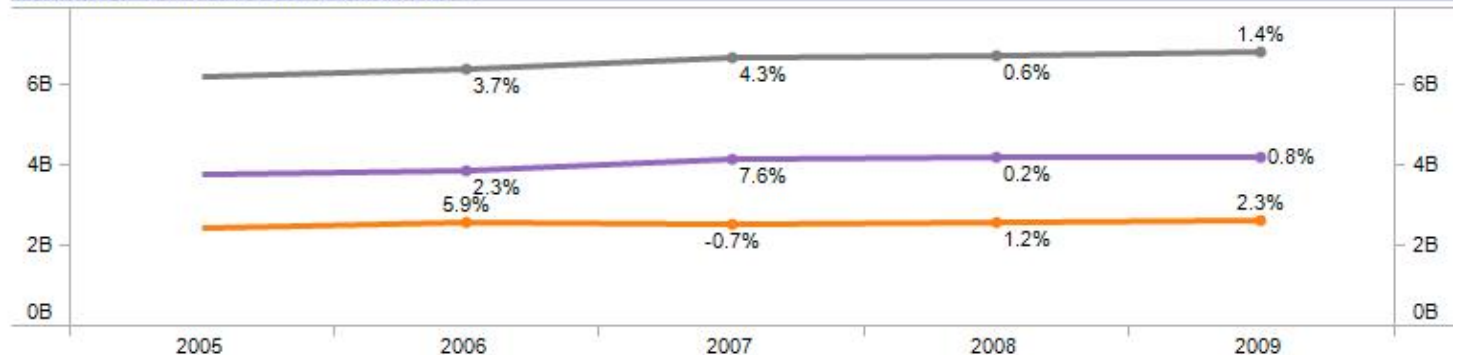
Pick Years f..

Category

- Non-Residential
- Residential
- Non-Residential and Resi..

- 2005
- 2006
- 2007
- 2008
- 2009

County Trends for Electricity Usage - kWh Residential/Non-residential Breakdown



Energy Challenges with Gas

Select a Year

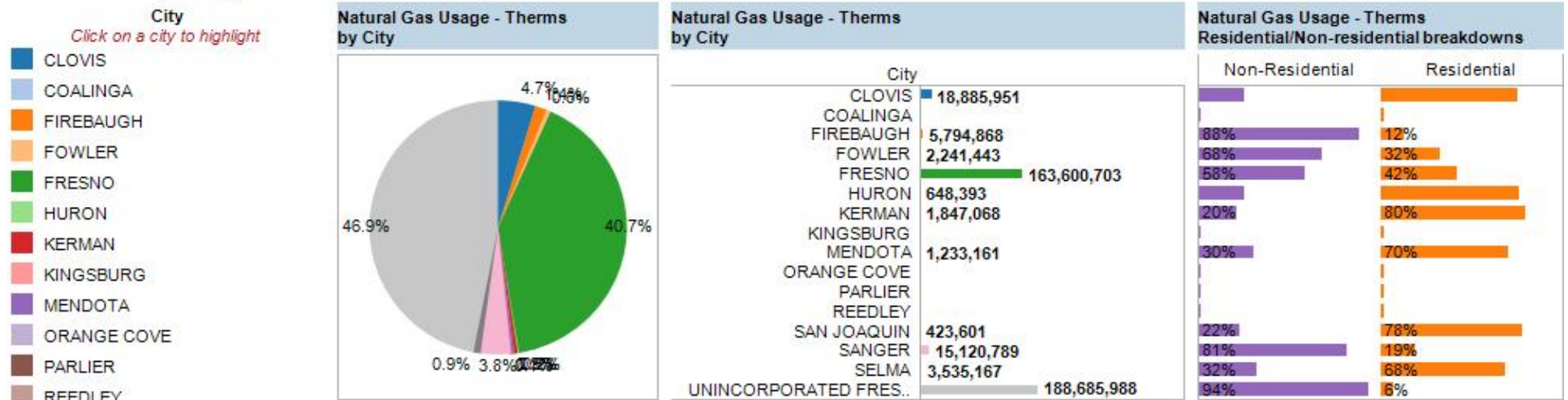
2009

Show History

Select a.. Natural Gas Usage - Therms

This page shows breakdown of energy (electricity, natural gas, or overall energy) and estimated emissi..

FRESNO County Energy Overview Report showing Natural Gas Usage - Therms for Selected Year



Trends - All Years

Pick Years f..

Category

■ Non-Residential

■ Residential

■ Non-Residential and Resi..

2005

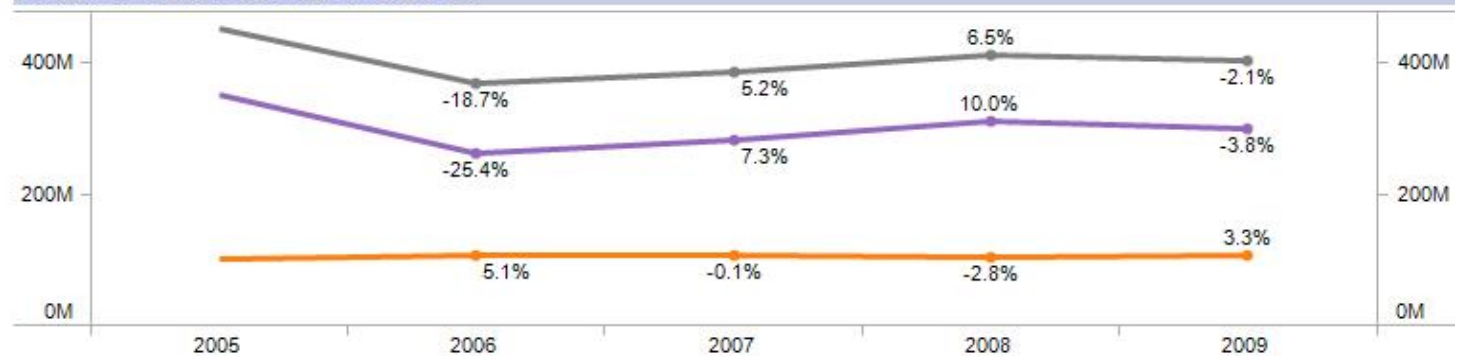
2006

2007

2008

2009

County Trends for Natural Gas Usage - Therms Residential/Non-residential Breakdown



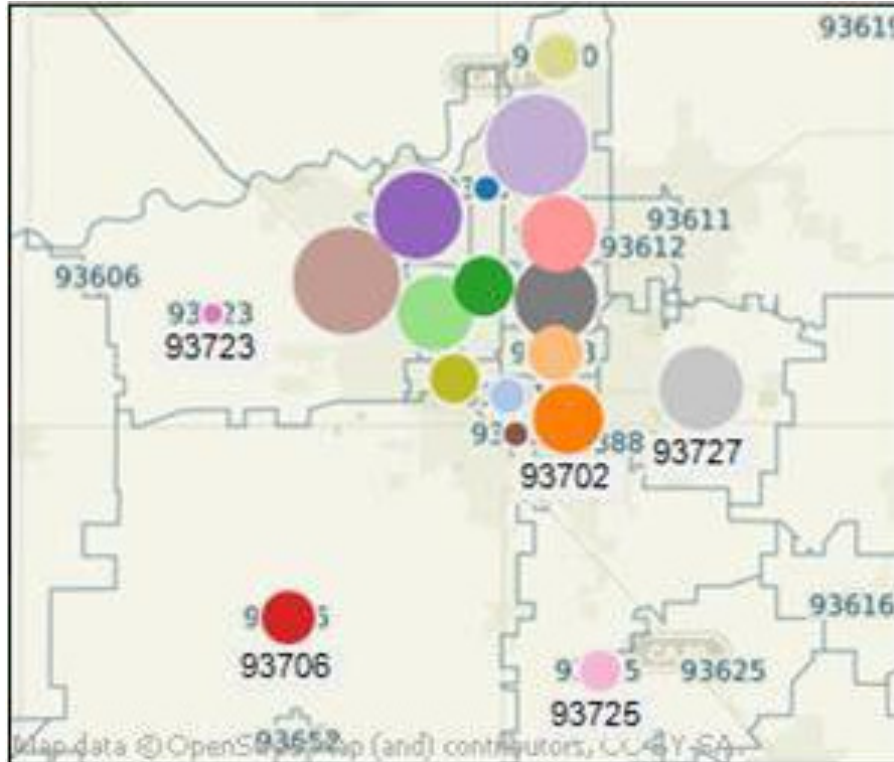
Economic Impact

- In 2009 Fresno community spent over \$866 million on electricity and natural gas!
- 40%, or \$346 million, by residential households.
- 60%, or \$520 million by commercial/industrial users.
- Lowering usage 30% would add \$260 million annually to the Fresno economy!!
- **Sustainable Fresno Energy Efficiency programs are designed to lower energy use to benefit the local economy!**

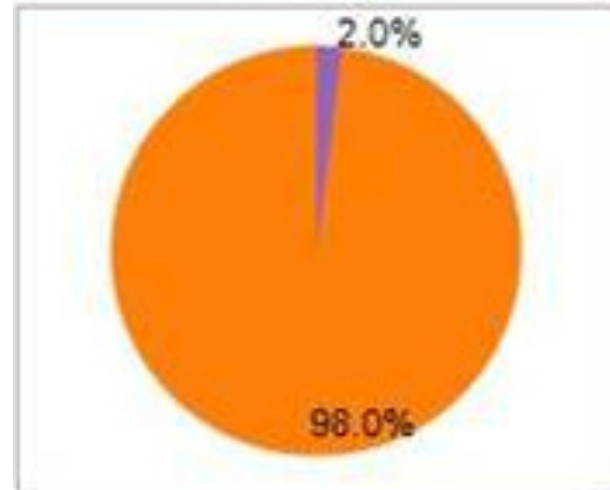
The Energy Connection



We Started With Single Family Homes to Help Families in Tough Times!



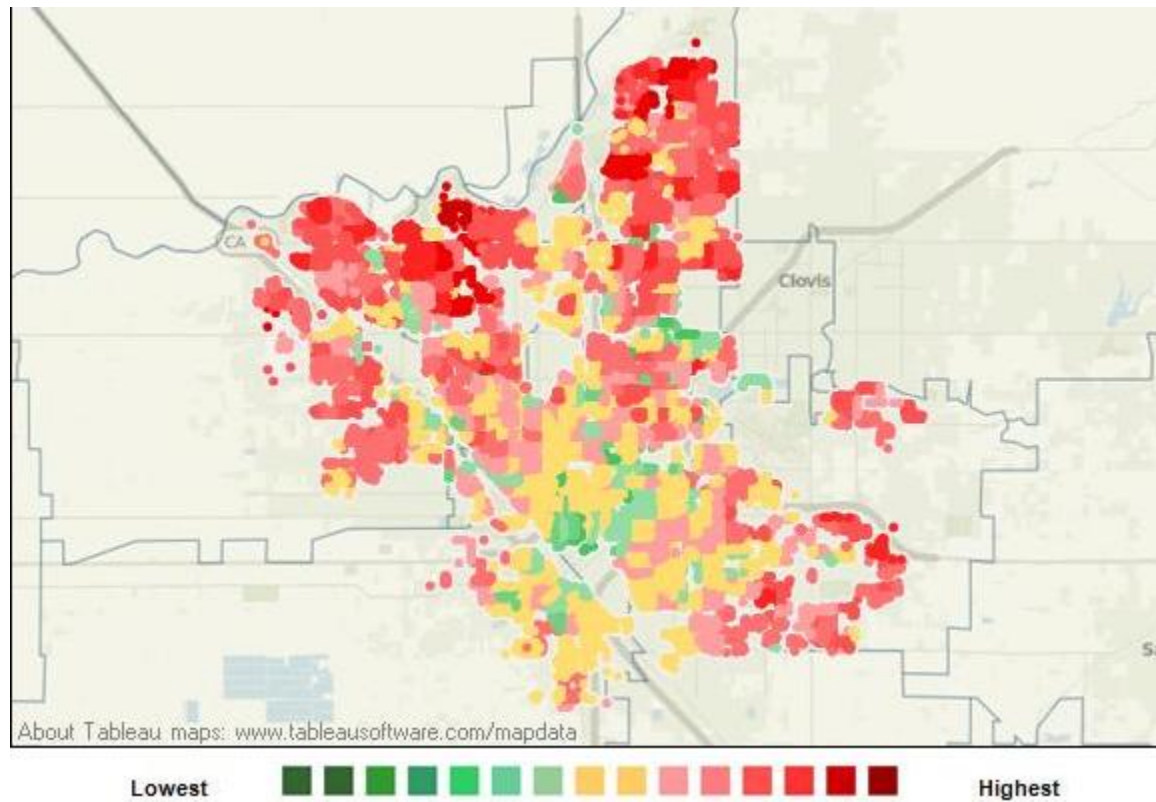
Residence Type Break-down
Total kWh 2005 to 2010 by Residence Type



What Has Been Missing for Homeowners to Invest in Energy Efficiency?

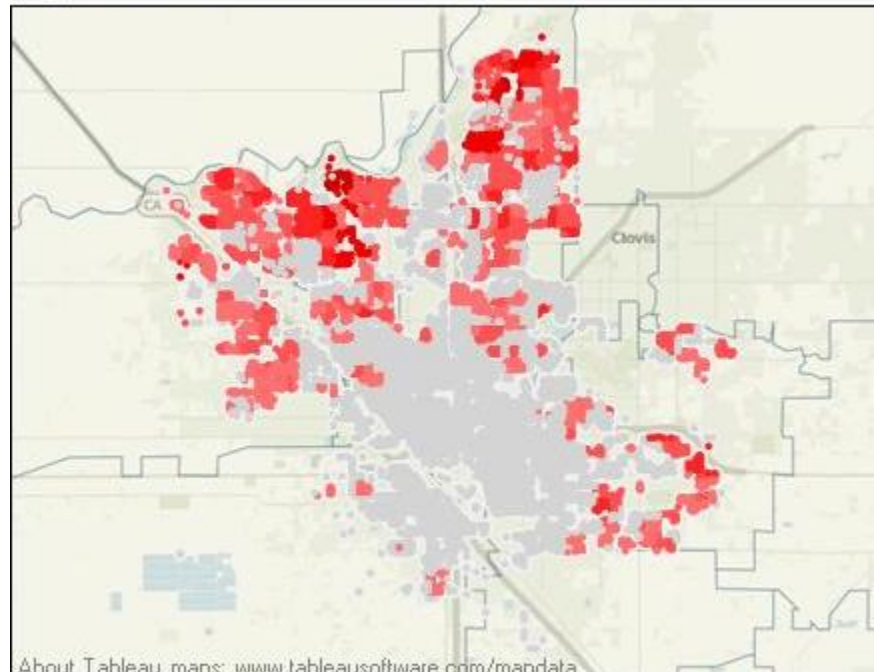
- Accurate, independent information and guidance from a source they trust.
- Focus group testing revealed homeowners trust the City of Fresno regarding home energy efficiency.
- Guidance about rebate programs from the utilities.
- Utility programs miss the highest energy efficiency opportunity homeowners.
- Good financing.

Energy Opportunity Map All Groups



Top 50,000 Highest Energy Efficiency Opportunity Group

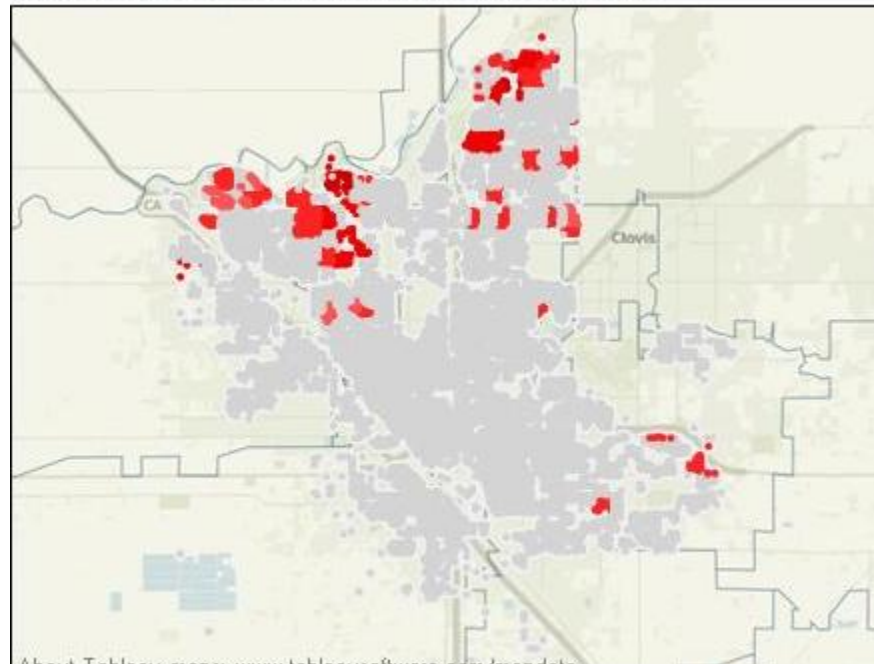
Targetted Areas - *click on corner icon to expand the map*



Your target list contains **50,270** customers, of which
20,780 (41.3% of your target list) are in the Highest Energy Efficiency Opportunity group
13,541 (26.9%) are in the 2nd highest Energy Efficiency Opportunity group

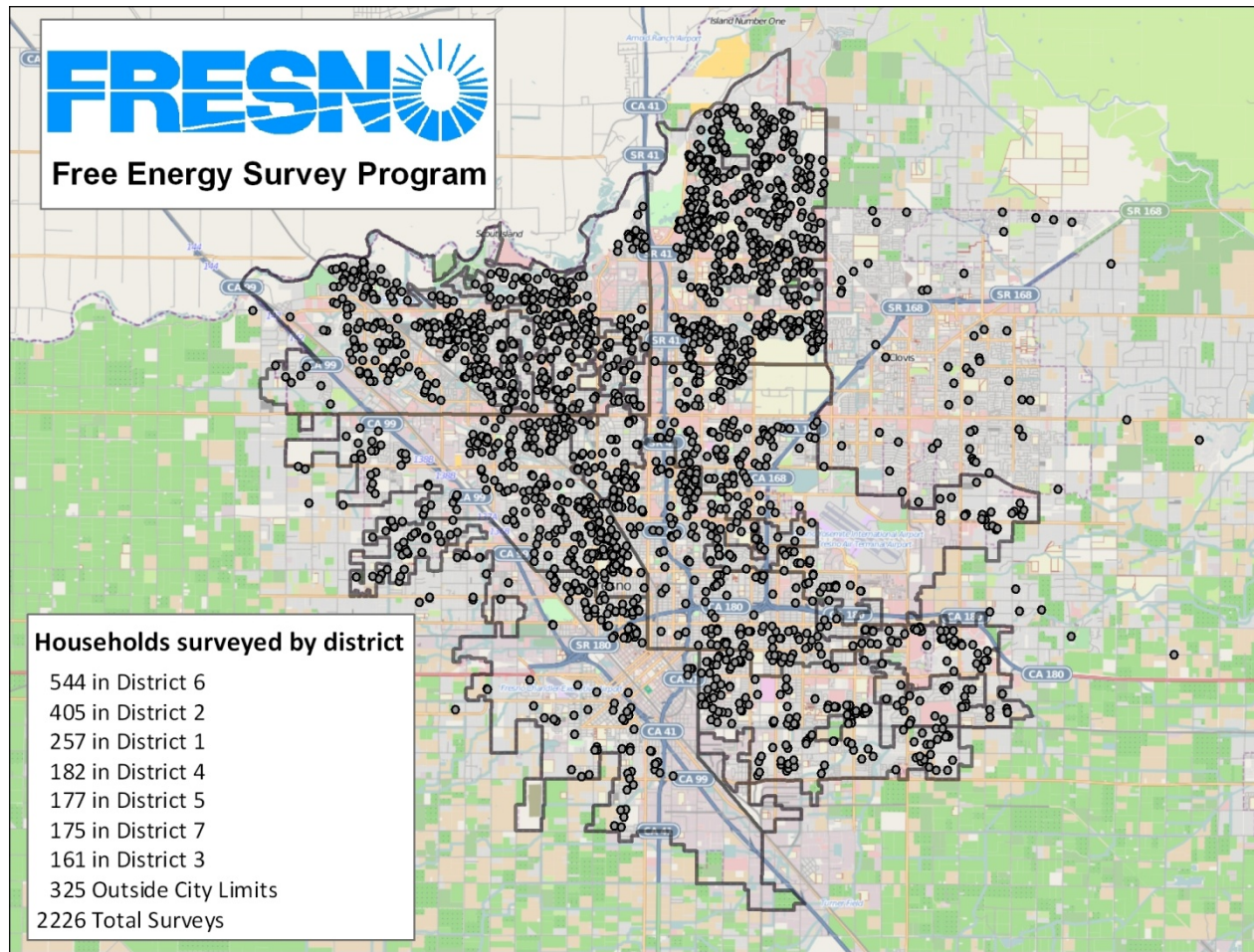
Top 10,000 Highest Energy Efficiency Opportunity Group

Targetted Areas - *click on corner icon to expand the map*

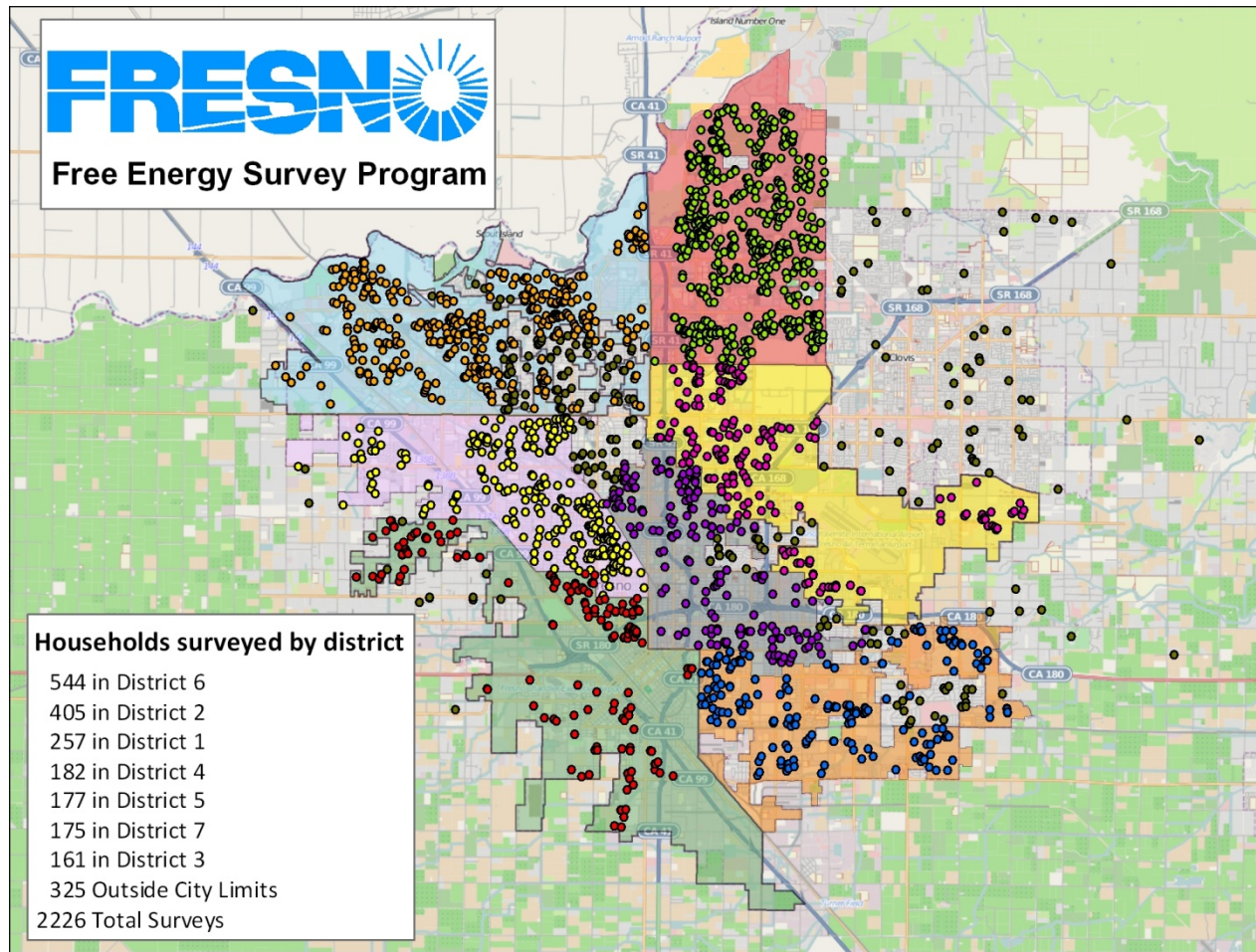


Your target list contains **9,848** customers, of which
5,432 (55.2% of your target list) are in the Highest Energy Efficiency Opportunity group
2,260 (22.9%) are in the 2nd highest Energy Efficiency Opportunity group

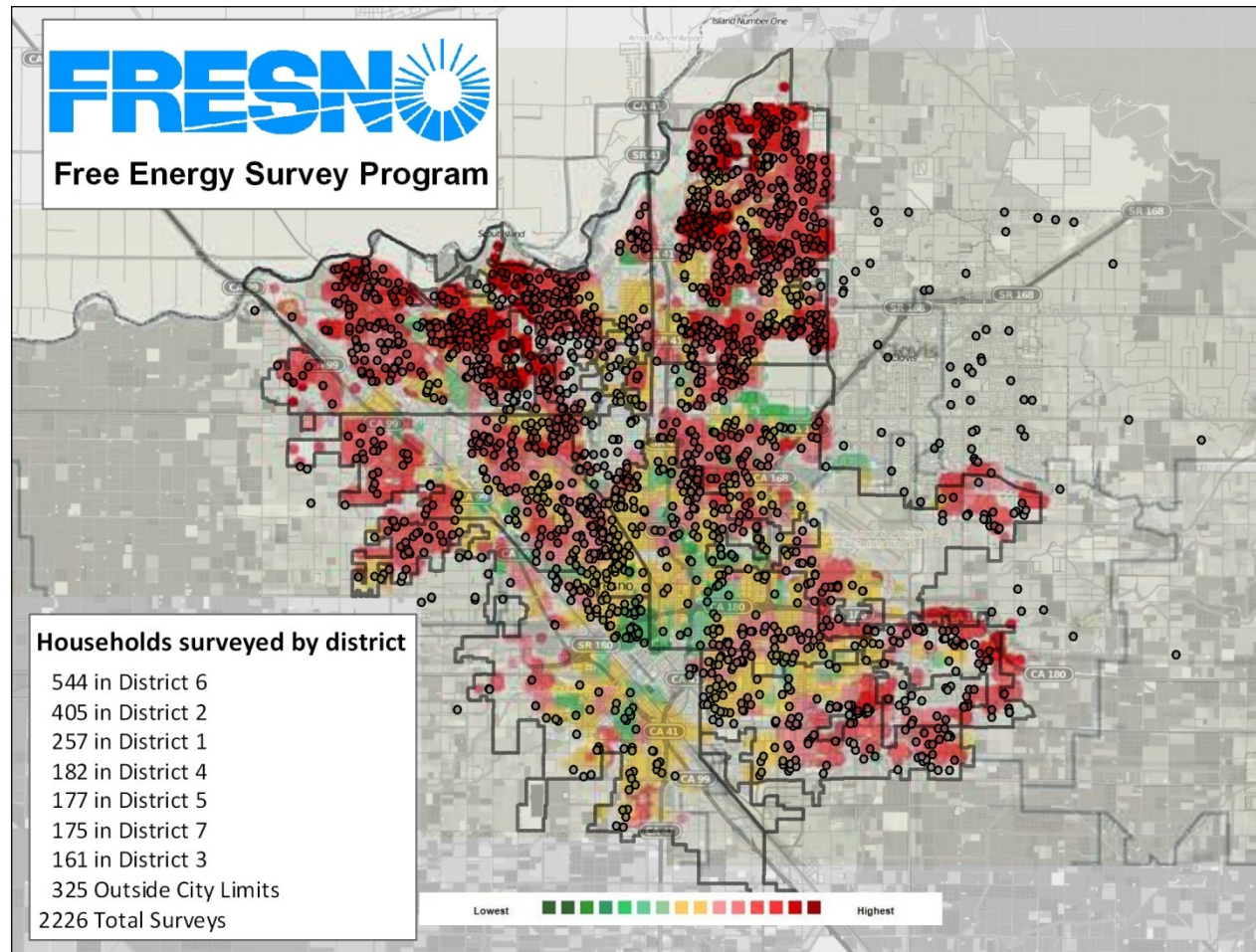
Surveys Completed as January 4, 2012



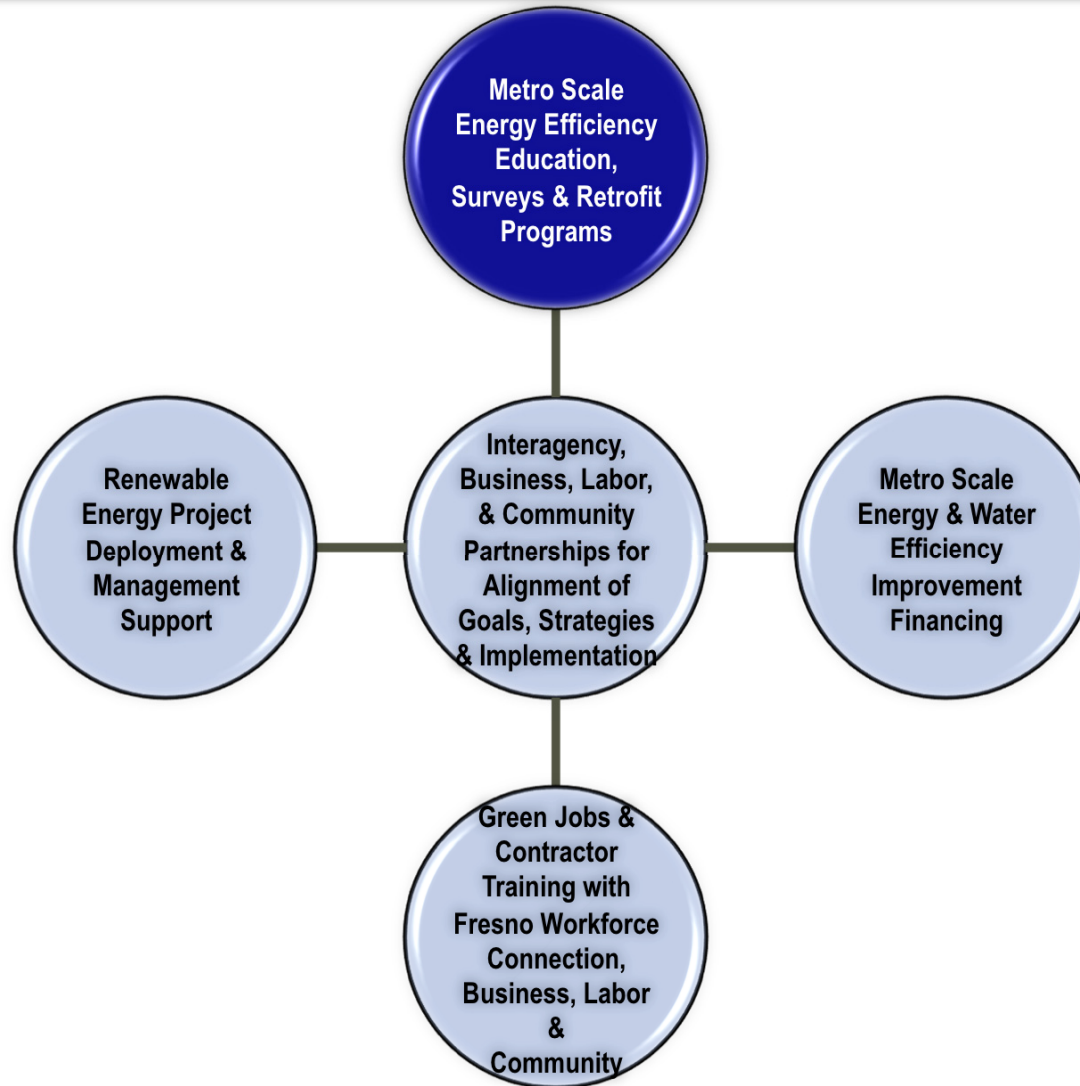
Surveys Completed as January 4, 2012



Energy Savings Opportunity Drives Demand for Surveys



The Energy Connection



Sustainable Fresno Free Residential Energy Surveys (Home Tune-up Program)

- Program started July 2009 and enhanced in March 2011 to include HERS II Whole House Rater analysis.
- Service not offered by any utility programs.
- Over 2,200 residential surveys completed to date, with over 650 of those being HERS II.
- Program designed to educate the public and create demand for energy efficiency contractor services.
- Program points homeowners to Energy Upgrade California rebate program and new loan resources.
- Program services Fresno, Tulare, Kings, and Kern Counties..

Example of Homes We Survey and Problems We Find



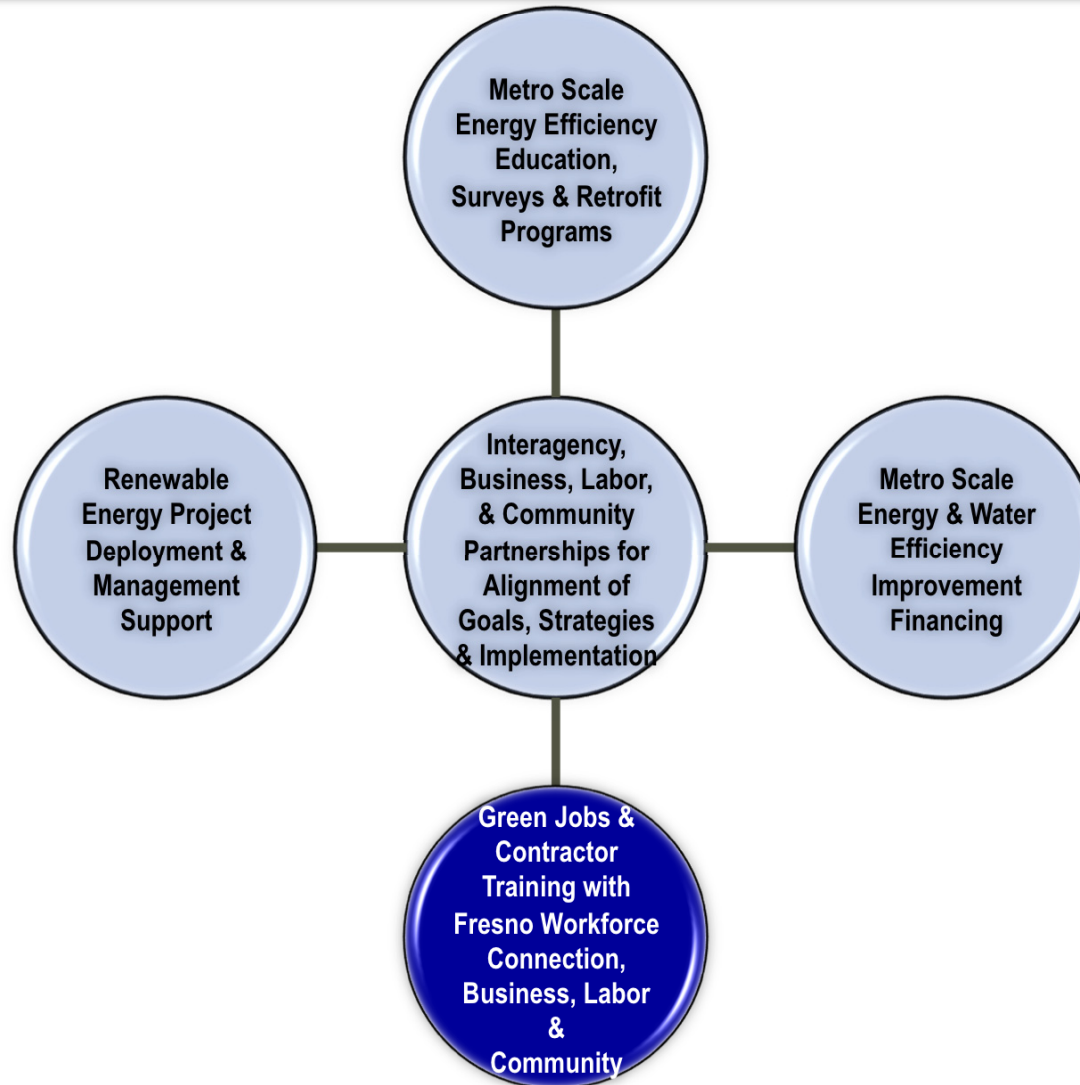
Direct Economic Benefits

- Recent poll revealed 70% of homeowners take action based on energy survey reports.
- Typical energy savings is from 10 to 30+%.
- Average reported cost savings per home is from \$300 to \$2,400+ per year.
- Typical retrofit investment \$600-\$40,000 per home based on phone poll results, but some projects have been over \$100,000 in value.

Program Leverage

- One-time investment of \$1.7 million in Federal funding to date has produced an estimated \$1 million in annual energy cost savings for residents and \$3 million in increased local business activity.

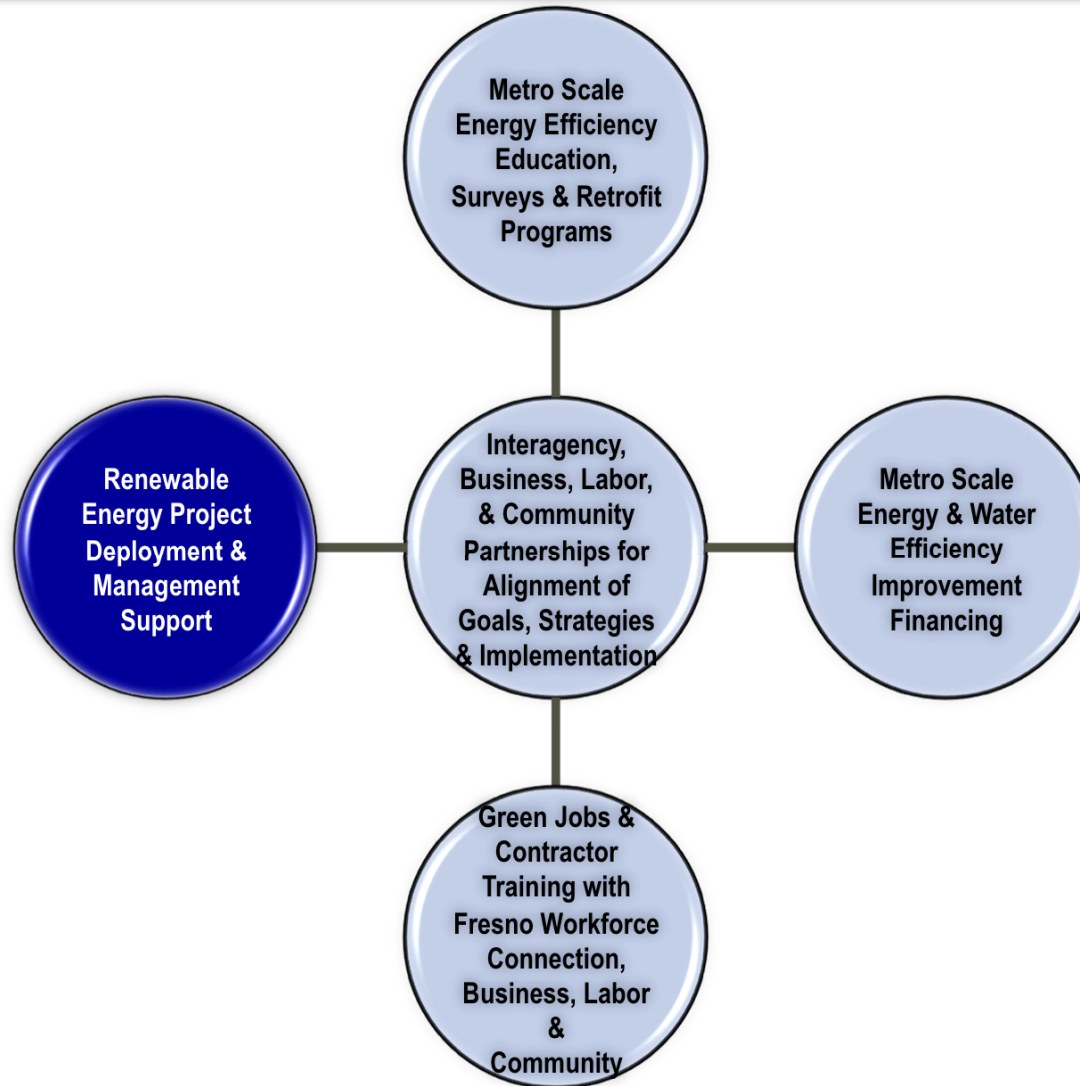
The Energy Connection



Contractor Training and Coordination

- Sustainable Fresno provides free training for contractors to receive BPI certification for participation in Energy Upgrade California rebate programs with 90 contractors trained to date.
- Home Tune-up program free energy surveys help contractors avoid the high costs for equipment and training necessary to do testing for Energy Upgrade California rebate program participation.
- Sustainable Fresno Division developed protocol for contractors to receive homeowner energy reports and then review with clients.
- Contractors are marketing the Home Tune-up program free energy surveys to their customers to drive new business.

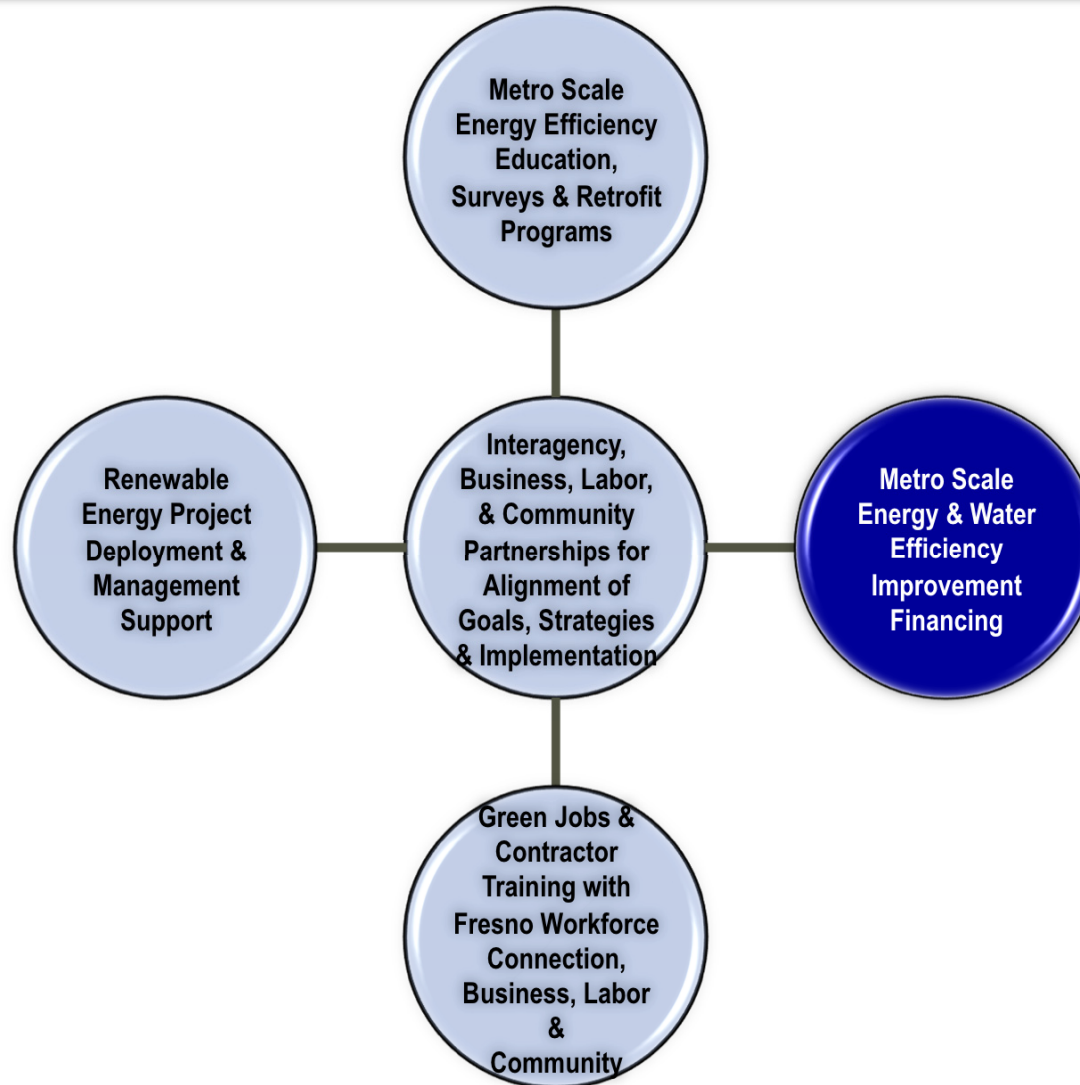
The Energy Connection



Renewable Energy Projects

- Sustainable Fresno Division promotes solar power projects through the Home Tune-up energy survey program and the commercial PACE financing program.
- Fresno has processed over 350 permits for solar power projects in the last six months with 23 of those projects being commercial properties.
- Fresno ranks number 4 in the State for solar power installations with over 22 MW currently deployed.
- Solar contractors actively market the Home Tune-up program as a way to drive new business.

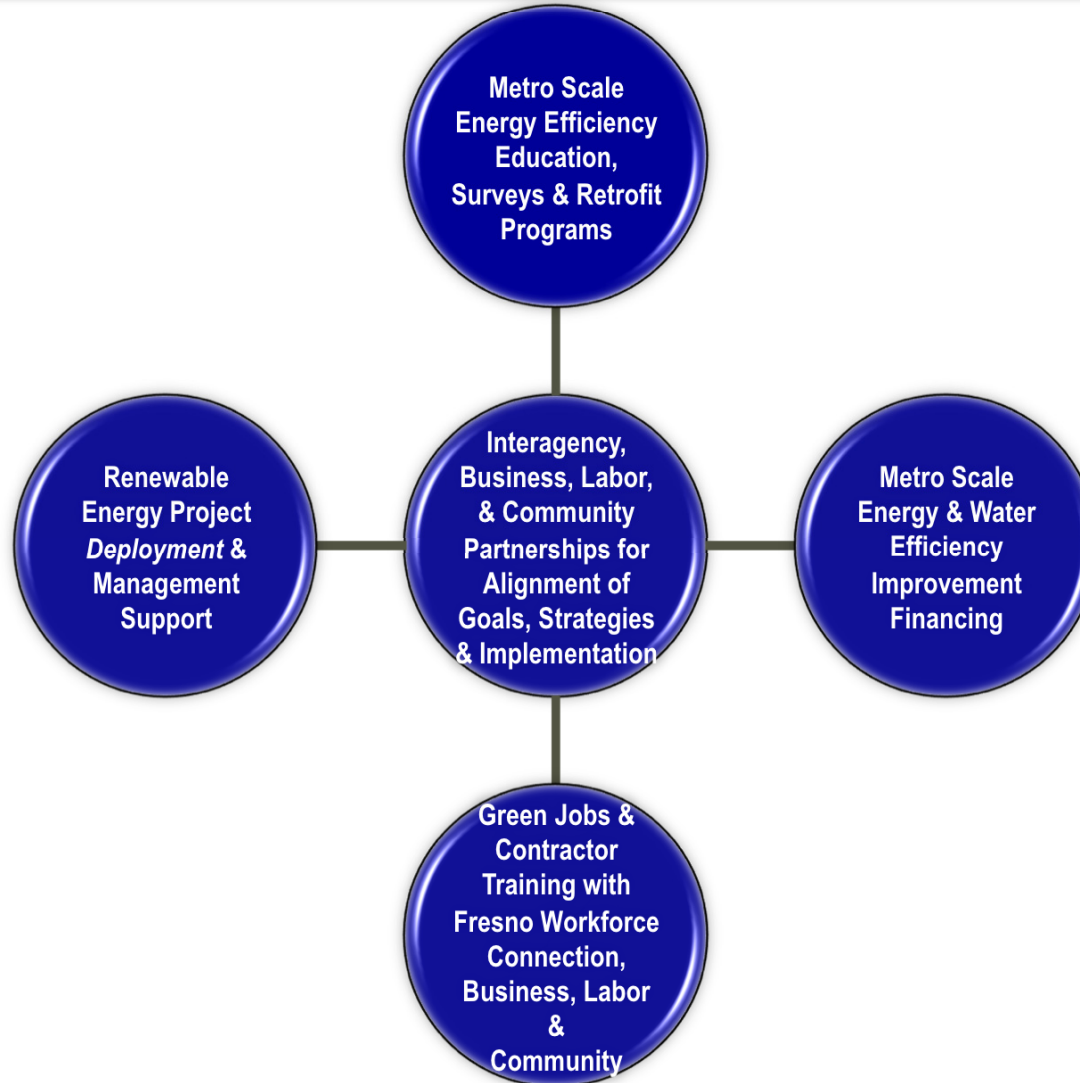
The Energy Connection



Retrofit Financing

- Sustainable Fresno Division brought forward for Council approval on January 13, 2011 the first commercial Property Assessed Clean Energy (PACE) financing district in Fresno County.
- Clovis, Sanger, and Kerman have also established commercial PACE districts.
- On December 22, 2011, the commercial PACE financing district issued the first Notices to Proceed on four projects in the Fresno/Clovis area for over \$375,000 in new business for local contractors.
- Sustainable Fresno Division is partnering with a San Joaquin Valley local credit union to market their energy efficiency loan and Fresno is a HUD Powersaver loan pilot community.

The Energy Connections Completed



Planned Next Steps

- Identify and secure funding to continue Home Tune-up program past June, 2012.
- Expand financing options for residential homeowners.
- Expand commercial PACE financing.
- Expand resources for commercial businesses.
- **Continue Sustainable Fresno Energy Efficiency programs designed to lower energy use to benefit the local economy!**



Questions?

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