



“Building Stronger Small Businesses using Energy Efficiency, Continuous Monitoring & On Bill Financing”

Green Collar Jobs Council Financing Panel

May 17th, 2011
Sacramento, California

How Does THIS Worker Help Build A Foundation For Sustainable Green Jobs?



In Leipzig, Germany, old GDR apartment houses are retrofitted to use up to 75-90% less in energy costs.

This “deep dive” approach to maximizing energy savings can pay off in California where cooling costs are significant.



“Quad” Pane Windows

Can also be installed as two sets of double pane windows



Why Does This Make A Difference?

- Major envelope based savings means larger projects “pencil out.”
- Combining envelope AND lighting projects increases ROI
- HVAC issues are minimized because smaller systems do the job.
- Savings reductions of 75-90% can be achieved.
- This kind of major long term renovation attracts capital.



KfW Bankengruppe of Frankfurt, Germany

<http://www.kfw.de/kfw/en/index.jsp>

This federal bank in Germany is the equivalent of a cross between the SBA loan program provider and the Washington based Federal Housing Financing Authority (FHFA), that shut down PACE.

They provide long term loans as low as 1.5% for energy saving retrofits that deliver 80%+ energy savings. This is no small program offering over 8B Euros in loans this past year.

The default rate is 0.8%, less than one percent.

Unlike the FHFA, they believe strongly that energy savings actually help to pay down loans for energy efficiency improvements!

Continuous Monitoring



24 Seven Food and Fuel

Santa
Rosa



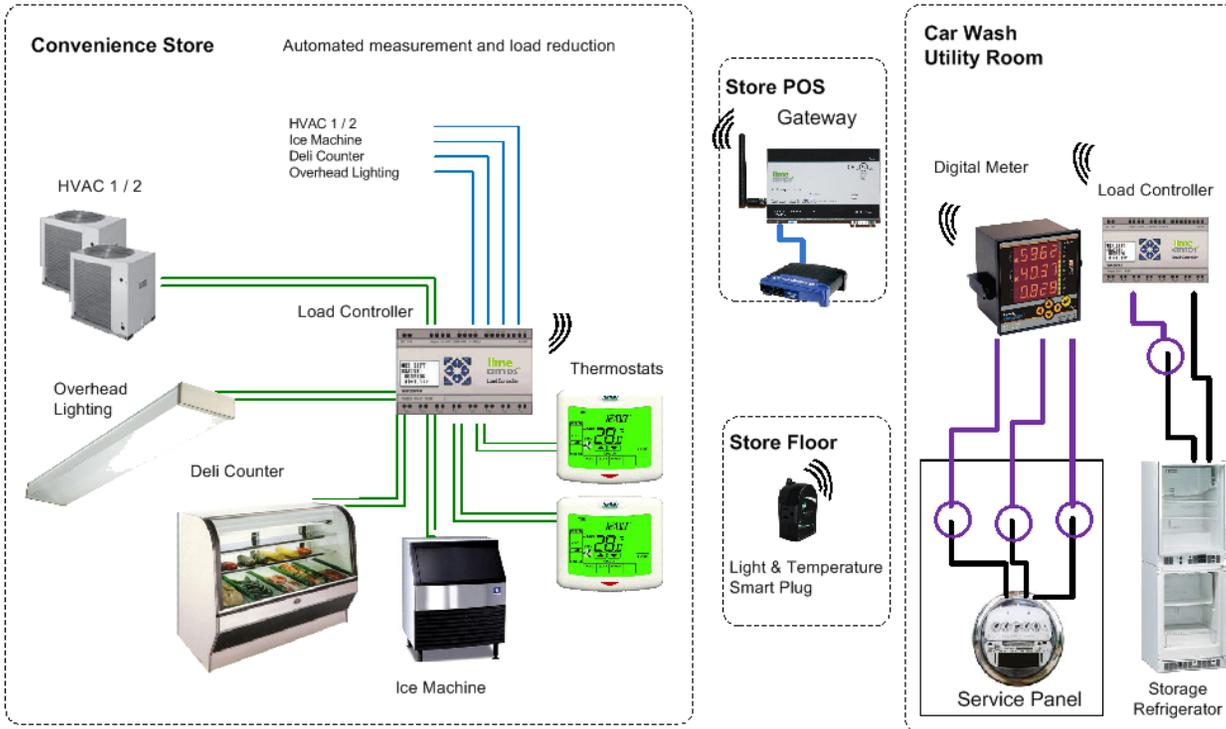
Equipment Summary

24 Seven Fuel and Food – Santa Rosa, CA



Automated Demand Response

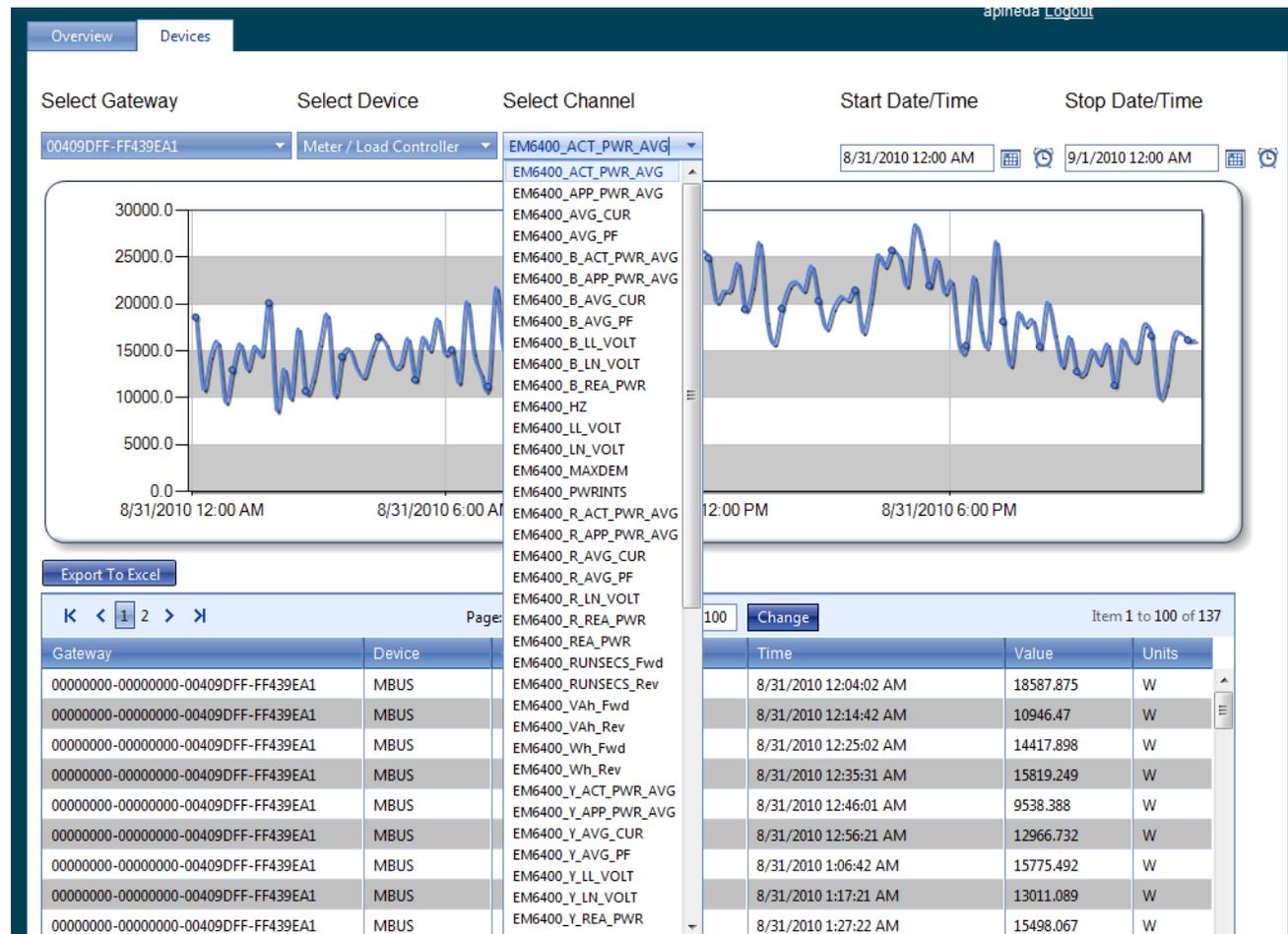
- 2 HVAC units
- Overhead lighting
- Deli Counter
- Ice machine
- Storage refrigerator
- Digital meter



All sensor data available real-time

Secure Web Site allows visual charting and export of data.

Samples captured every 10 minutes



Compressor Units in Back of Store

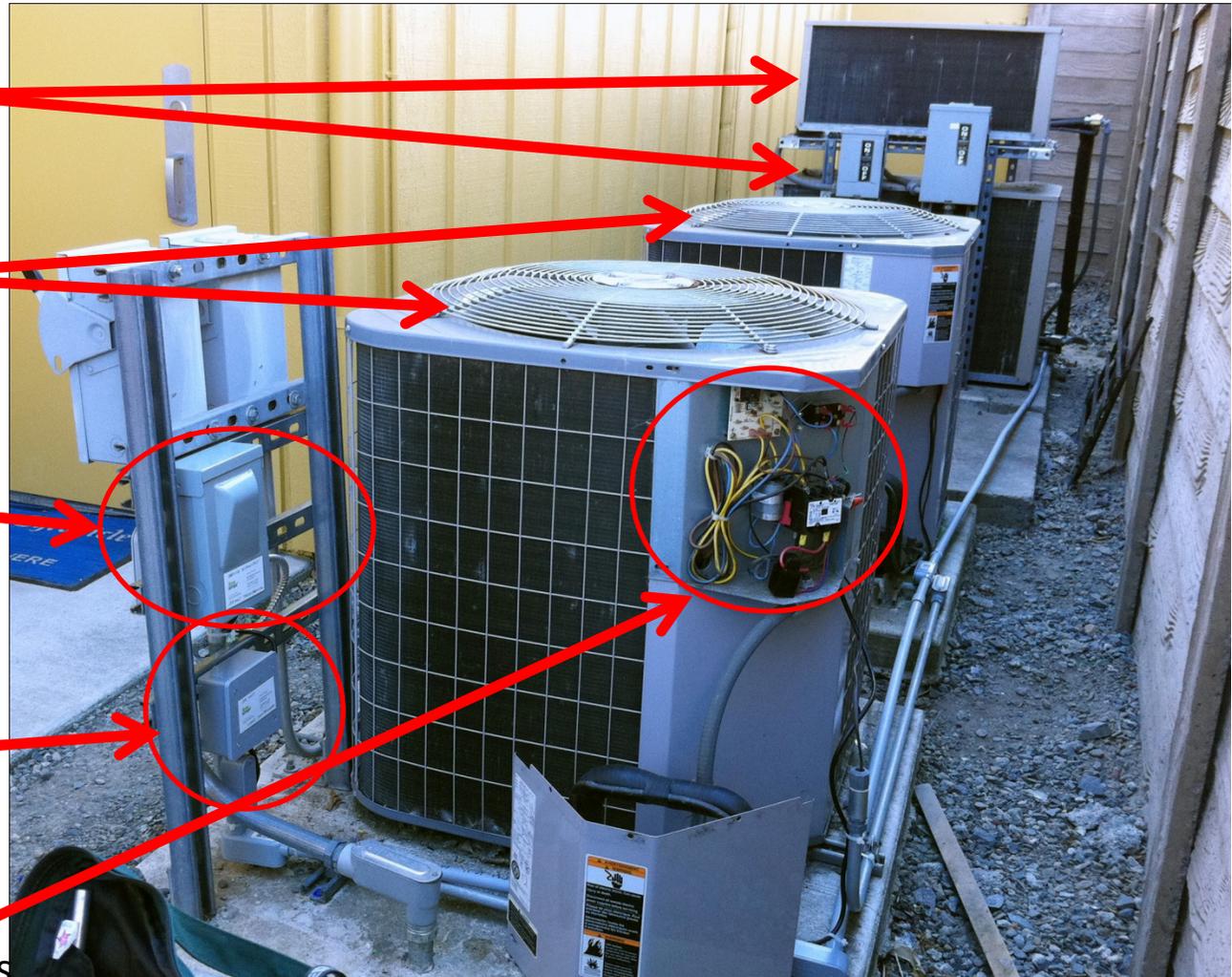
Reach In Coolers 1&2
Compressors

HVAC 1 & 2
Compressors

24VAC tap from
240VAC

1 Load Controller
monitors usage and
cycles all units during
DR event

See next page for details



Continuous Monitoring =
Savings Integrity

That Assurance Attracts
Capital!

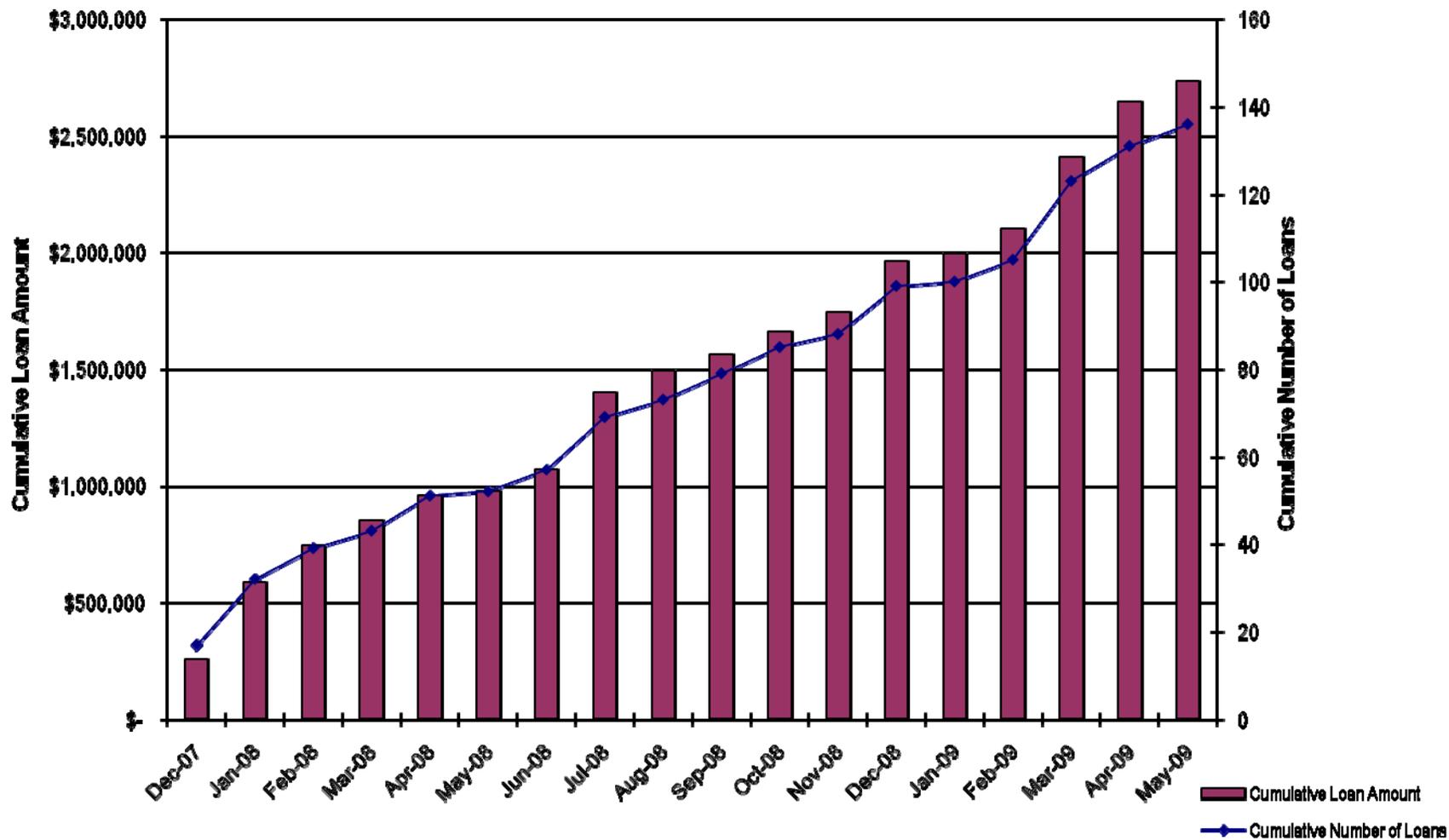


On Bill Financing (OBF), is a utility based method of providing seamless 0% financing through the monthly power bill for small business energy efficiency improvements.

- Project costs financed by Utility Partner
- Usually 0% financing to Customer
- Allows the purchase of energy efficiency to be the same as the purchase of energy – verified savings is crucial!

“OBF” provides more small businesses with the opportunity to address energy costs as a "controllable", thus helping the bottom line.

**San Diego Gas & Electric
On-Bill Financing - Issued Loans
18-Month Cumulative History Ending December 2009**



Average loan amount: $\$14,600,000.00 / 663 = \$ 22021.00$ (SDG&E 4/1/11)

- Average loan term: Currently just over **3 years** (calcs below assume 36 months)
- Each** SD area business therefore receives an average **\$ 7340.00 per year** in OBF delivered energy cost savings which is now used to pay the 36 month loan.
- Beginning after 3 years, each business will then receive an average of **\$ 7340.00 in recaptured profits each year for the life of the energy efficiency improvements.** (Controls using web based real time energy use measurements can claim a 20-30 year useful life.)
- The **663 SDG&E service area businesses** will produce an extra **\$ 4.1M** in total available **ANNUAL** profits to bolster the regional economy each year these energy saving measures are in place.
- SDG&E also benefits by claiming the properly counted savings value to support **energy efficiency based shareholder incentives** received from the CPUC.
- Finally, the **663 contracts** totaling **\$14.6M** provide work for over 100 **different energy efficiency contracting businesses**, all just in the SDG&E service territory. Many of these firms are small businesses.



- Small Business California
- Statewide non-partisan small business advocacy organization
- www.smallbusinesscalifornia.org
- Core Issue Areas:
 - [Healthcare](#) [Workers compensation](#) [Workforce development](#) [Government regulation](#) [Energy](#) [Access to capital](#)
- Hank Ryan, Executive Director

Cell: 510-459-9683

Email: hryan@smallbusinesscalifornia.org