Varied Approaches, Unifying Goals: Behavior Change & Local Government Partnerships







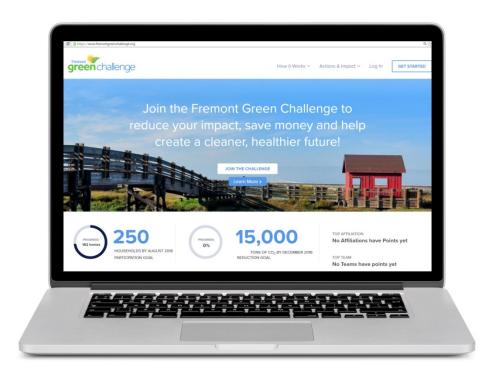








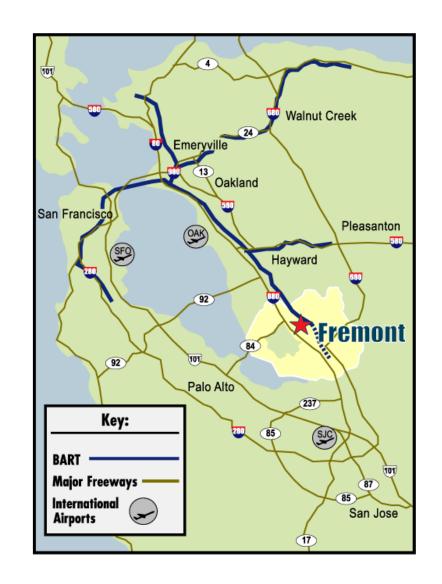
"FitBit® for Sustainability"



Engaging Residents on Energy & Climate Through an Online Social Platform

Setting the Context: Fremont, CA

- Incorporated in 1956 from 5 historical farming districts:
 - Centerville
 - Niles
 - Irvington
 - Mission San Jose
 - Warm Springs
- Rapid growth during the 60's & 70's
 - Cheap fossil fuels
 - Less traffic congestion
 - Large tracts of land available for housing
 - Climate change not yet a concern



Sustainability in Fremont, CA

General Plan Vision –

Sustainable, Modern,
 Strategically Urban City



Climate Action Plan –

 25% GHG Emission Reduction from 2005 Baseline by 2020

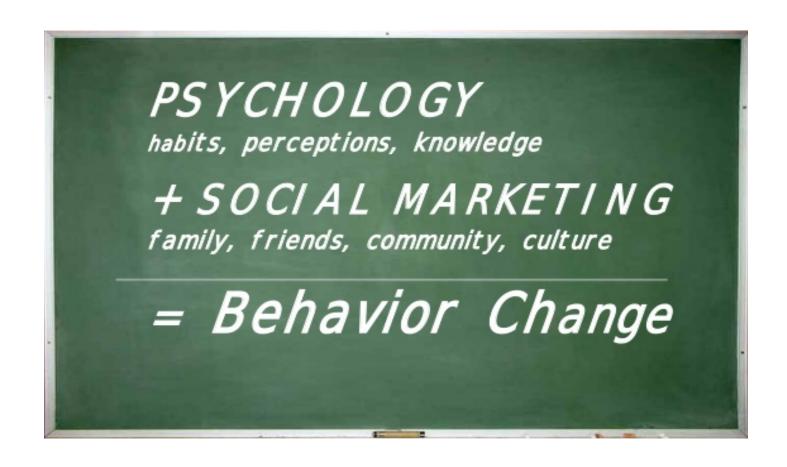


Why A Residential Focus?

- Residential activity (homes & passenger vehicles) represents 58% of community-wide GHG emissions
- Successes can easily be measured by \$ savings
- Individuals take pride in successes → bragging rights with friends, neighbors, co-workers, & peers
- Positive behavior changes at home trickle over into workplaces, classrooms, etc.

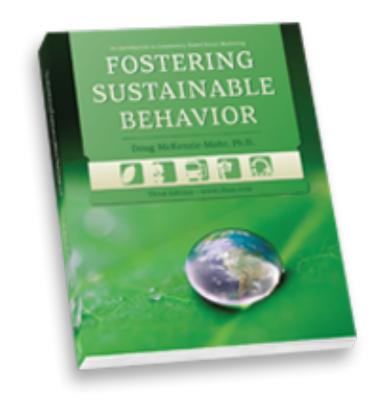
Community-Based Social Marketing

 Approach developed by environmental psychologist Dr. Doug McKenzie-Mohr



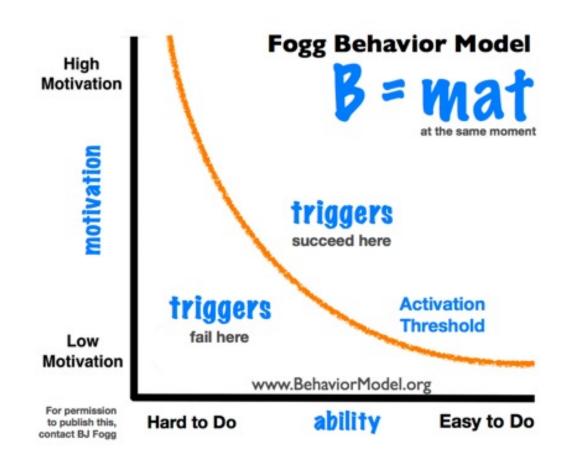
CBSM Approach

- 1) Identify benefits and barriers to an activity
- 2) Develop a strategy utilizing "tools" that have been shown effective
- 3) Pilot the strategy
- 4) Evaluate the strategy once it has been implemented across the community



Dr. BJ Fogg's Behavioral Model

• Motivation, Ability, and Trigger (M.A.T.) must converge to result in desired behavior.



Fremont's Climate Engagement & Behavior Change Strategies

1. Promote existing no/low cost residential programs offered through utility partnerships



2. Promote energy upgrade projects and clean energy financing



3. Develop a residential group purchase campaign for solar and zero-emissions vehicles



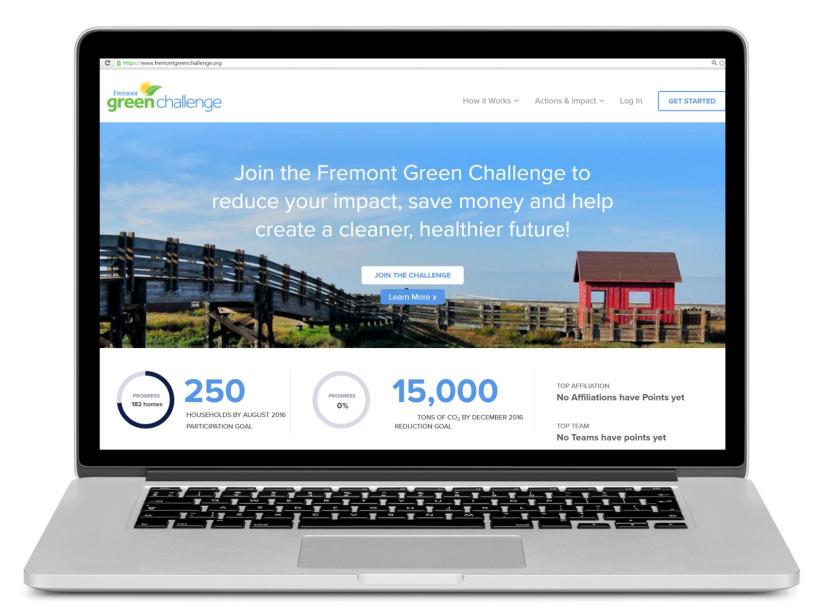
4. Run a "Green Homes Challenge"



"Green Homes Challenge" Concept

- CBSM approach focused on triggers of behavior change
- Online platform for pledging and tracking of "green" commitments at the household level
- Actions that result in energy/water/waste reductions, bill savings, and reduce GHGs
- Levels of participation based on ability & ease
- Educational info and local resources & incentives
- Tracking of both individual and community-wide progress in publicly visual way
- Recognition of participant successes

www.FremontGreenChallenge.org



— How It Works —



Create your profile

It's easy to get started. Create your household profile and enter some information on your current activities so we can track your success!



Take sustainable actions

Browse a list of actions that will help reduce your impact, then add them to your dashboard. We'll help with next steps, costs, and questions.



Work together

Create a team of households so you can collaborate together. Discuss actions with the whole community. And compete with other communities too!

LEARN MORE ABOUT HOW IT WORKS

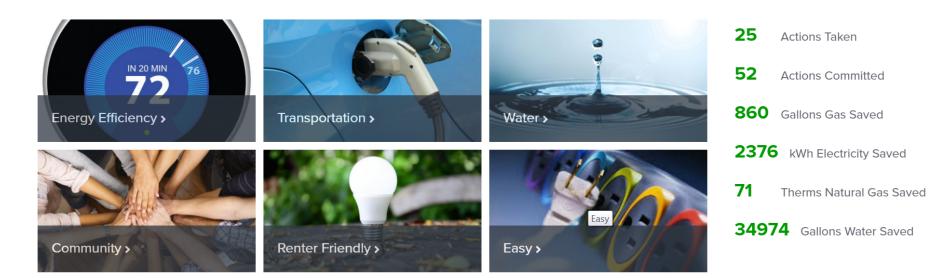


It only takes a little bit to make a difference, together we can make a big impact. You just have to start.

Learn more about how you can get started.

Explore Actions

Actions are simple everyday things that you can do to reduce your impact, and many also save you money. Click on a category below to explore the actions.



Your actions can make a difference too.Join the Fremont Green City Challenge today!

GET STARTED

Take Action To Make a Difference.

Choose an action from the list below and take action to lower your impact.



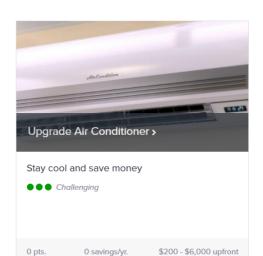
Renter Friendly

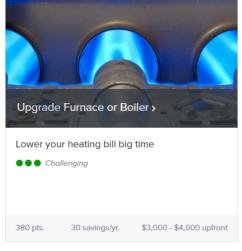
Choose a Category:

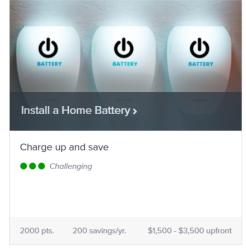
Home Energy Systems

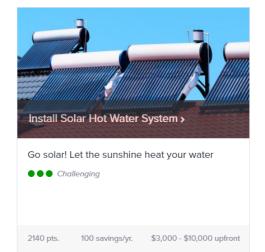
Choose a Level:

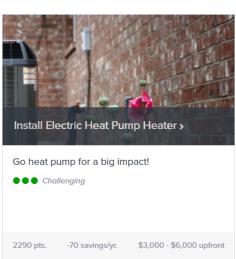
Challenging











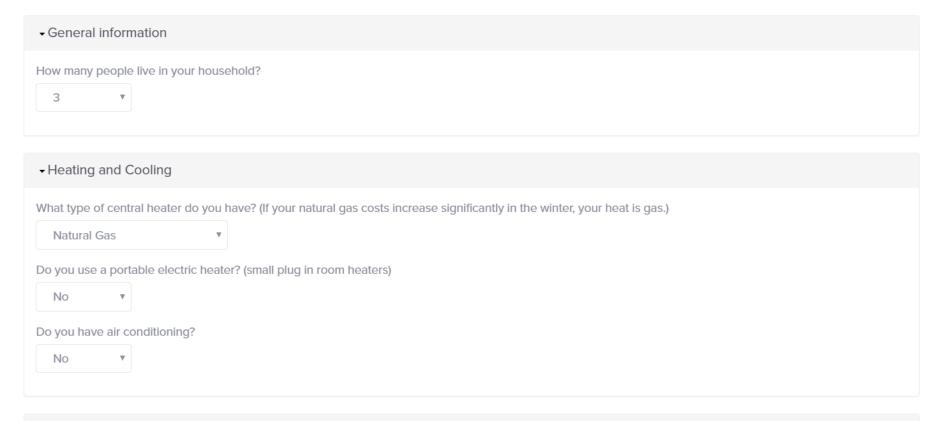


Edit Household Energy Profile

Back to Dashboard Household Profile Household Energy Profile Account Settings Messages

To calculate your points and savings for completing actions, we need to know a bit about the energy your household uses now. This only takes a few minutes! If you have questions or need help please let us know.

Your Household Energy Profile



→ Water Heater

What type of hot water heater is in your home? (If your water heater has a pilot light, it is natural gas or propane.)

Your Household Energy Profile
• General information
• Heating and Cooling
• Water Heater
Pool / Hot Tub
Stove/Oven
• Dryer
• Green Electricity
▶ Vehicles
• Alternative transportation
• Airline Travel
• Garbage & Recycling
Food
• Water Use
• Utility Data
• <u>Natural Gas Use</u>
• Electricity Use

- Utility Data

First, please tell us if you have a utility account with at least 12 months of service for your home energy use (electricity or natural gas). If you pay for utilities in another way (like to a landlord or condo association) or if you have a utility account with less than 12 months of service, we can estimate your energy use for you.

 $\overline{\mathbf{v}}$

We have a utility bill for at least one energy use (electricity or gas)

Entering your utility account energy use

Which home energy use do you have a utility account for?

Both of the above ▼



If you have a utility account with at least 12 months of service, click the button to add your utility data.

ADD MY DATA

All you need is your utility account log in and password. Click "Add My Data", log in, then click "Continue" and submit your approval to add your data.

Note: If you have solar panels - STOP! You must hand enter your data below.

Or if you prefer not to use the automatic data link, you can also hand enter your data. Just follow these simple steps.

Natural Gas Use

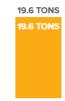
• Electricity Use

— My Progress ——









19.6
TONS PER YEAR
CURRENT CO₂E
0% REDUCTION!



YOU HAVE REACHED THE CLEAN ENERGY STAR LEVEL. YOUR HOME IS 20-40% BELOW AVERAGE CO₂e EMISSIONS! Join or Start a Team

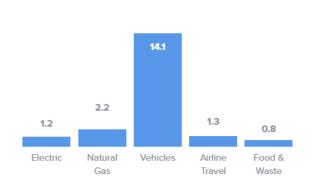
94 COMMUNITY GROUP RANKING

10 NEIGHBORHOOD RANKING

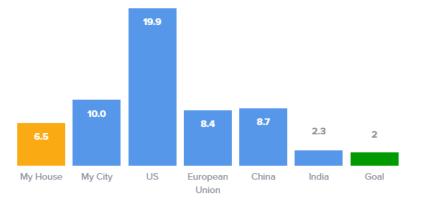
Challenge Leaderboard >

--- My Baseline ----

My Household 19.6 TONS CO2e PER YEAR



Average Per Person 6.5 TONS CO2e PER YEAR



Total

34,200 Points

\$1,360 Savings/year

54% Reductions CO₂e

Action	Points	Savings	Due	Next Step	Progress
Line Dry Clothes	270	\$20/yr	05/2017	Step 1/4: Set up a clothes line	In progress I Mark Complete I Remove
Install Smart Power Strips	130	\$60/yr	05/2017	Step 3/4: Choose your power strip	In progress I Mark Complete I Remove
Participate in Demand Response	600	\$50/yr	06/2017	Step 1/5: Learn about Demand Response	In progress I Mark Complete I Remove
Offset Air Travel	2900	\$-20/yr	06/2017	Step 1/3: Learn about carbon offsets	In progress I Mark Complete I Remove
Upgrade Clothes Washer	160	\$10/yr	08/2017	Step 3/7: Choose the right clothes washer	In progress I Mark Complete I Remove
Install Efficient Irrigation	160	\$10/yr	08/2017	Step 2/4: Design your drip system	In progress I Mark Complete I Remove
Plant Trees	40	\$0/yr	08/2017	Step 1/6: Find the right location	In progress I Mark Complete I Remove
Upgrade Clothes Dryer	870	\$-100/yr	08/2017	Step 1/3: Choose the best dryer for your home	In progress I Mark Complete I Remove
Replace AC Filters	0	\$0/yr	09/2017	Step 1/3: Find your air filters	In progress I Mark Complete I Remove
Install a Greywater System	360	\$30/yr	02/2018	Step 2/7: Put a bucket in the shower	In progress I Mark Complete I Remove
Choose Green Electricity	4640	\$-180/yr	04/2018	Step 1/3: Learn about Green Power options	In progress I Mark Complete I Remove

Challenge Leaderboard





15,000
TONS OF CO₂ BY DECEMBER 2017
REDUCTION GOAL

TOP COMMUNITY GROUP

Coyote Hills Girl Scouts

TOP TEAM

GreenGirls#1

Community Challenge Stats



25 ACTIONS COMPLETED



74 ACTIONS COMMITTED



150 ACTIONS PREVIOUSLY COMPLETED



114
HOUSEHOLDS
PARTICIPATING



4,190DOLLARS SAVED



11 TONS CO2 REDUCED





860
GALLONS SAVED



71 THERMS SAVED



34,974 WATER SAVED

Most Recent Actions

Fill Dishwasher

Dry Wisely

Install Low Flow

Upgrade Dishwasher

Fill Dishwasher

Wash Clothes Wisely

Take Shorter Showers

Take Shorter Showers

Reduce Air Travel

Dry Wisely

Green Challenge Outreach Strategies

Communications

Monthly emails with program updates, challenges, & special offers

Stakeholder engagement

- Include community orgs as affiliation groups
- Engage community leaders to participate, submit success stories and spread word on challenge (council members, school board, faith leaders, etc.)

Student programs

- Community service hours for student volunteers
- Collaboration with teachers to integrate with curriculum
- Competition with other schools, provide prizes or other recognition

Media

City website, newsletters, earned media, social media, event tabling



Rachel A. DiFranco Sustainability Manager Community Development City of Fremont rdifranco@fremont.gov (510) 494-4451

Varied Approaches, Unifying Goals: Behavior Change & Local **Government Partnerships**

(WRCOG)



Definition

Behavior Change [bih-heyv-yer] [cheynj]

1. refer to any transformation or modification of human behavior.

Purpose - "Bridging the Gap"

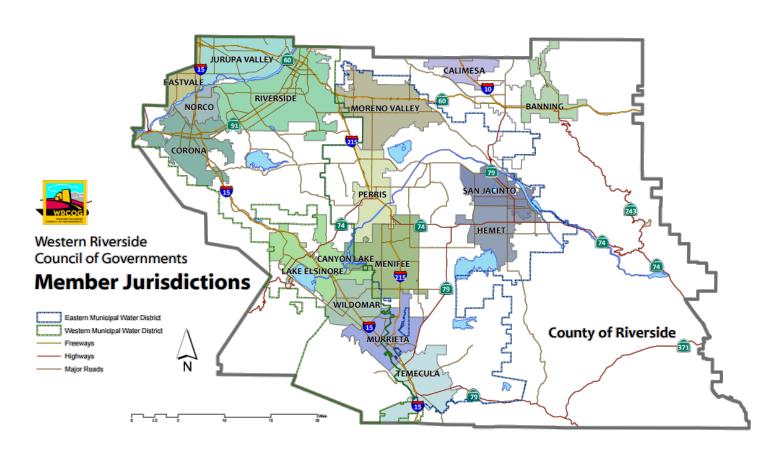
Local Governments are in a unique position to promote behavior change to achieve various positive environmental goals, even if the environment is not the priority.

Identify, engage, and leverage existing resources to promote change.

Western Riverside Energy Partnership

Overall Savings:

- 13,600 mWh saved
- Energy consumption reduced in municipal facilities by 13.3%



Identify your goals

Utility bill savings

Energy efficiency

Climate Action Plan goals

Air quality

Greenhouse gas reductions

Engage

City Council

City Manager

Inter-departmental communications

Your utility

Leverage

Community Stories

- Comprehensive Mobile Home Program (CMHP)
- Low-Income program outreach initiative

Municipal Stories

- Direct Install Municipal evolution
- Promote / recognize the good work Cool Planet Awards

Questions?

Tyler Masters, WRCOG Masters@wrcog.cog.ca.us (951) 955-8378

Varying Approaches, Unifying Goals: Behavior Change & Local Government Partnerships Ivana Dorin, Program Manager, The Energy Coalition

idorin@energycoalition.org (949)732-1085











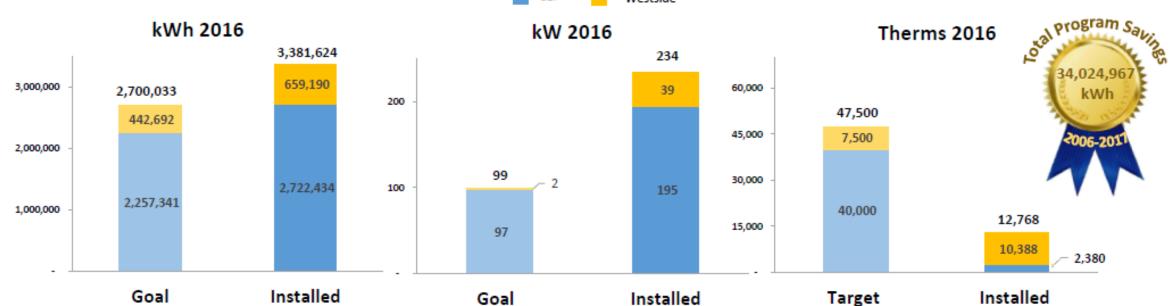




% In 2017 Pipeline				
kWh	109%			
kW	52%			
Therms	23%			

Accomplishments & Forecasts





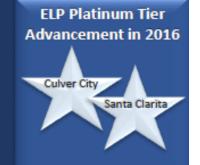
Marketing & Outreach

Event Booths:



Energy Efficiency Presentations:





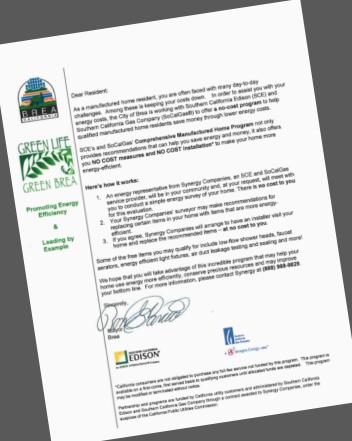
Lunch N Learns:

Scheduled Events in 2017:

Our Behavior Change Beginning

- Comprehensive Approach
- Unique & Tailored
- Fun!
- Aha Moment









Evolving Behavior Change Strategies

Categories:

- Community Marketing & Outreach
- Building Municipal Retrofit Projects
- Recognition



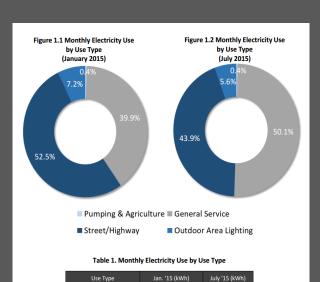








Support, Understanding, & Recognition



1,293

129,685

170,497

1,457 181,886

159,402 20,165

Pumping & Agriculture

General Service

Street/Highway Lighting

Outdoor Area Lighting

City Name: "Beach City California"				
Overview	kWh	Therms		
2006 Baseline	7,650,000			
Installed	1,247,000	4,950		
% Achieved	16.3%			
Estimate with Pipeline	27.3%	9,000		
Commitment_Stage: Installed (13 records)				
Service Contract ID Key	Description	Date for Summary Table	Other Notes / Issues	
500000000	Veterans Memorial Hall	2013	Installed	
500000000	Beach City PLOS	2013	Installed	OFFIC
ELP Credit	Pre 2013 ELP Credit	2013	Installed; ELP Credit ONLY	
500000000	Beach City Plunge Pool VFD	2014	Installed	
50000000	Beach Parking Structure	tructure 2014 Installed		
Direct Install 2014	Direct Install	2014	Installed	
500000000	Beach City Street Lighting	2015	Installed	
50000000	Senior Center	2016	Installed	
50000000	Transportation Center	2016	Installed	
500000000	Beach City Hall RCx	2016	Installed	

Commitment_Stage: Commitment (4 records)									
Service Contract ID Key	Description	Date for Summary Table	Other Notes / Issues	EndUse	Annual kWh Savings	Annual kW Savings	Annual therm Savings	Estimated Annual Dollar Savings	Incentive
500000000	Streetlights	2017	Set for Q2 (01/01/1900)	LIGHTING	500,000	0		75,000.00	130,000.00
500000000	Streetlighting Phase 2	2017	Working with TEN, set for Q2 (01/01/1900)	LIGHTING	102,000	0		15,000.00	22,000.00
500000000	Beach Parking Lots	2017	Construction date has been set, working with TEN. (01/01/1990)	LIGHTING	146,000	10	-	22,000.00	33,300.00
SCG EMS City Hall	City Hall EMS	2017	Waiting on the paperwork to be approved per Gas Co. (01/01/1900)	GAS	0	0	9,000	0.00	0.00
					748 000	10	9,000	112,000	185 300

Commitment_Stage: Wishlist (4 records)									
Service Contract ID Key	Description	Date for Summary Table	Other Notes / Issues	EndUse	Annual kWh Savings	Annual kW Savings	Annual therm Savings	Estimated Annual Dollar Savings	Incentive
Public Works	Public Works Facility		Estimates per audits; daylighting controls, occupancy sensors, exterior LEDs, bi level stair and hallway lights		55,400	14	0	0.00	0.00
Fire Stations	Audits		Estimates per audits; daylighting controls, exterior LEDs, bi level stairwell lights replacement	-	37,600	8	0	0.00	0.00
City Parking Structures & Parks	Lighting	Awaiting Timeline Estimation	Consultant came out and there is elegibility for lighting replacement		0	0	0	0.00	0.00
Police Department	Audits	Awaiting Timeline Estimation	Waiting on full TA budget to coordinate with TEN for audits		0	0		0.00	0.00
					93.000	22	0	0	0

The City of Culver is part of the	?
Westside Energy Partners	hip
Culver CITY (SocalGas **Support Energy one)	
Culver City is collaborating with Southern California Edison* and SoCalGas* through the Community Energy Partnership to help our City achieve our energy savings goals and receive maximum incentives and rebates! Qualifying energy efficiency projects in our City facilities may include: Lighting Retrofits Cooling/Heating Projects Water Heating and Pumping Pool Covers Plus more!	
In addition, we now have access to technical assistance for our energy projects at no cost. Please keep us informed about what energy projects you're currently working on, planning for the future, have previously installed, or wish you could begin so our City doesn't miss out! Through the Partnership you can take advantage of Energy Education Workshops on topics like Title 24 building codes, offered at no charge to municipal customers.	
Culver City is proud to be a leading city in Energy Eff To learn more trell us about your projects, please contact Cathi Vangas [catherine.vargas@culver(by.org 310) 253-4411	iciency!











Industry Professionals

Designers, architects, HVAC technicians, refrigeration technicians are just some of the examples of the building professionals who are essential to building more energy-efficient communities. The Partnership will make available energy efficient utility and local programs and webinars for training and education on energy efficiency standards, techniques and technologies.

Small- and Medium-Sized Businesses

The utilities help businesses realize immediate and long-term energy savings through the installation of energy-saving lighting and other measures. During an initial visit, an Energy Specialist performs a facility assessment to identify ways to save energy.

The Partnership can also assist businesses in utilizing utility programs, such as commercial rebates, incentives and financing programs, as well as demand-side management programs that reduce energy use during peak hours.

Community

By providing leadership in energy efficiency, local government partners wil help local residents learn more about saving energy and managing energy costs at home. Partners can assist local residents in learning more about saving energy and managing their energy costs, as well as accessing utility programs such as energy efficiency rebates and incentives. For more information about San Luis Obispo County Energy Watch:

www.sloenergywatch.com



Kill A Watt Meter Lending Library



The San Luis Obispo Energy Watch Partnership's Kill A Watt™ Meter Lending Library is a free program that loans Kill A Watt™ meters through public libraries to residents of San Luis Obispo County.



Kill A Watt[™] meters monitor the amount of electrical consumption from plug-in appliances. By simply connecting your appliances into the meters, you can find out which appliances are using the most energy and which are the most energy-efficient.

Save energy! Save money!

- TVs and Stereos
- Computers
- Game Systems
- Toaster Ovens
- Refrigerators

- Microwaves
- · Washing Machines
- Air Conditioners
- Heaters
- Fans

Discover opportunities for saving energy and money, so you know what appliances to unplug and if it's a good time to buy new appliances.

This program is administered through San Luis Obispo public libraries. Meters can be checked out for up to three weeks. A valid library card is required for checking out meters.

For more information, please email energy@co.slo.ca.us or call 805.781.5623





This program is funded by California utility customers and administered by PG&E under the auspices of the California Public Utilities Commission.





Energy Fair



Thursday, October 20th, 2011 4 pm - 7 pm Cambria Veterans Hall 1000 Main Street

Speaker Series

- * Energy-efficiency (4:00 pm 4:30 pm)
 PG&E Energy Solutions & Service Representative
 Southern California Gas Company Representative
 This session will cover energy-efficiency solutions for your home and business.
- * Energy Upgrade CaliforniaTM (4:30 pm 5:00 pm)
 Ashley Watkins, Ecology Action
 This session will cover ways to increase your home's efficiency and lower your utility bills through upgrades to heating, air-conditioning, water and other systems.
- Residential Solar Process & Rebates (5:00 pm 5:30 pm)
 Les Kangas, REC Solar
 This session will cover the process, permitting, and sizing of solar energy systems.

Exhibition (4 pm - 7 pm)

* Featuring LOCAL companies, contractors, and retailers that provide energyefficiency products and services for your home!

















For more information please contact Trevor Keith, Energy Program Coordinator email tkeith@co.slo.ca.us or call 805.781.1431

This program is funded by California utility oustomers and administered in pertnership with Pacific Gas and Bectric Company, Southern California Gas Company, San Luis Obispo County and participating municipalities.



San Luis Obispo County, Planning & Building Energy Newsletter, Spring 2013

The Energy Newsletter seeks to inform county employees of projects, programs, and energy-efficiency training opportunities. San Luis Obispo County is committed to leading by example by reducing energy use in its buildings to lower costs and greenhouse gas emissions.

Energy Rebate & Information Center Unveiling!

Energy staff is proud to announce the unveiling of the new Energy Rebate & Information Center in the Old Courthouse Building in downtown San Luis Obispo! The center is located in the lobby, just outside the permit center, and contains important information on energy efficiency and renewable energy programs, rebates, financing options, and training opportunities. The information covers new and existing residential, multi-family, and commercial properties.



The event will include an introduction and explanation of available resources, and staff will be available to answer questions about energy programs and resources. Light refreshments will be served. Information on energy programs is also available online at www.slocounty.ca.gov/planning/Energy.htm.



Come early! The first 20 attendees will receive a SoCalGas insulated thermal travel mug! Date: Wednesday April 24th

Time: 11-11:30am Location: 976 Osos St. San Luis Obispo, CA

it Us at Earth Day

County energy staff will be out armed with energy efficiency info and fun giveaways at Earth Day 2013! Find us alongside the Air Pollution Control District and the Central Coast Clean Cities Coalition (C5).

Date: Sunday, April 21 Time: 10am-5pm Location: El Chorro Regional Park & San Luis Obispo Botanical Garden

Save the Date

THE ENERGY EVENT

Fun, food, and educational energy activities for the whole family!

Saturday, October 5th at Cuesta College

LANNING & BUILDING Update Of Sunty of San Luis Obispo

October has been Energy Awareness Month since a presidential proclamation in 1991. For more than 15 years, government organizations in partnership with businesses, associations, and concerned citizens

ENERGY AWARENESS MONTH

have observed this month with activities and programs to promote public understanding of our energy needs and to reduce energy consumption in our everyday lives.

In recognition of National Energy Awareness Month, a

group of local agencies and organizations have come together to offer activities designed to help the community learn about energy, the benefits of energy conservation, and recognize energy savings efforts in our community. The Energy Awareness Month planning committee is proud to offer The Energy Event 2013 as the Main event this October.

As part of the month's celebrations the County of San Luis Obispo, Pacific Gas and Electric Company and the Community Action Partnership of San Luis Obispo have come together to host the Shandon Energy Challenge. The Challenge will provide Shandon community members and businesses with an opportunity to take advantage of no-cost programs designed to reduce energy bills by improving energy efficiency. The project partners are in the process of visiting businesses and community members, sharing the benefits of energy efficiency, and installing projects at no cost. This community "sweep" has been piloted in an



THE ENERGY EVENT

effort to achieve as much savings as possible in a single community in the County.

Saturday, October 5th Cuesta College Student Center Bldg 5401 San Luis Obispo - Hwy 1

The Energy Event is an annual community event organized and hosted by the San Luis Obispo Regional Energy Alliance. This year's event will showcase student energy projects, hands-on activities, interactive exhibitor booths, and family-friendly entertainment. Bring the family for a fun filled day discovering how energy works and how you can enjoy a healthier planet and a healthier you. For more details check out our new website: Sloenergymonth.org or scan the OR code!





AWARENESS WUNTH

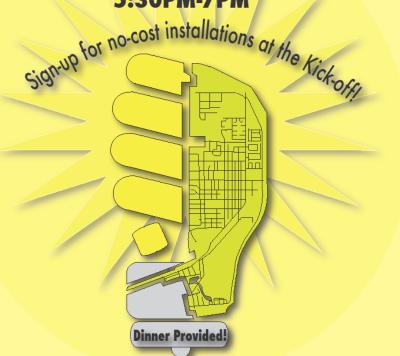
OCEANO ENERGY CHALLENGE KICK-OFF EVENT

A month-long opportunity to save money & energy!

Monday, March 24th

Oceano Coummunity Service District Boardroom
1655 Front Street

5:30PM-7PM



For more information:

Please contact 781-5623 or energy@co.slo.ca.us

This program is fully funded by California utility customers and administered by PG&E under the auspices of the California Public Utility Commission.











The Energy Saver

Resources You Need to Save Energy and Lower Your Bills A Publication of San Luis Obispo County Energy Watch









www.sloenergywatch.com



Energy Program Brings Local Business Owner "Biggest Break I've Ever Gotten in My Life"

Chris Goldie, owner of Pismo Bowl, had no idea how much energy her family-run retro style bowling alley and coffee shop diner could save, until Rebecca Weber from PG&E walked through her door. She heard proposals for energy-efficiency projects before, but it wasn't until Rebecca recommended an energy audit and put Goldie in contact with Staples and Associates that she saw the potential for big savings. After the audit, Staples and Associates performed energy upgrades that resulted in improved lighting and lower monthly energy bills. Goldie called it "the biggest break I've ever gotten in my life."

Thanks to the Small Business Direct Install Program, available through the Energy Watch Partnership, lighting upgrades in the building are expected to save a total of \$2,088.00 and 13,920 kWh a year. Goldie is overjoyed at the most noticeable improvement: "I have such better light now." The changes were made after Goldie met with the Energy Specialists and opted for an enhanced energy saving package. Staples and Associates replaced interior light fixtures throughout the building, including the restaurant and game area, the back offices, and over the bowling lanes. LED exit signs and conversion kits were also installed for additional energy savings. Thanks to program incentives, which covered much of the project's cost, the payback time is estimated at less than six months, and energy savings will continue long into the future.

Goldie was also impressed with the Energy Specialists' willingness to work around her schedule in order to avoid impacting business. "I can't be closed," said Goldie, so "they worked at night." The entire project was completed over the course of just a few days. "I'd recommend the program to anybody. They were awesome." To learn more about energy-efficiency opportunities, visit www.sloenergywatch.com.



Rebates and Incentives

Find rebates and incentives for improving energy efficiency at the following websites:

Pacific Gas and Electric Company

www.pge.com/businessrebates

Southern California Gas Company

www.pge.com/businessrebates

socalgas.com (search*MY INDUSTRY*)



Arroyo Grande Library,

Municipal Case Study

PROFILE

Location	800 Branch Street in Arroyo Grande
Square Footage	8,944
Upgrades	Lighting Retrofit
Completion Date	February 10, 2011



"It was easy to work with the group; they worked around our library schedule."

Melody Mullis, Administrative Services Officer I

Description

Lighting retrofits at the Arroyo Grande Library have resulted in a much "lighter, brighter library" according to Melody Mullis, Administrative Services Officer II. At one time, the library suffered from unsatisfactory lighting levels. "You could not read the labels on the books on the lower shelves at all in some areas – you needed a flashlight." Additionally, lamps kept burning out and keeping the place lit was "costing a fortune". On a recommendation from General Maintenance staff, brighter, longer lasting FO96T8 two lamp fixtures replaced the older, less efficient F96T12 two lamp fixtures in all public spaces.

While public areas in the library were now well lit and more energy efficient, back office areas still had the older, less efficient fixtures. Through the San Luis Obispo Energy Watch, FO96T8 two lamp fixtures

replaced the older, less efficient lighting, and a 15 watt fluorescent bulb replaced a 75 watt incandescent bulb. Additionally, an occupancy sensor was installed to use lighting only as needed. Mullis has appreciated less frequent calls about bulbs out in the back areas now that the entire library is well lit and saving energy on a daily basis.

Recent retrofits were completed through the Direct Install Program Qualifying PG&E customers may be eligible for an audit and installation of several energy-efficient measures free of charge. www.sloenergywatch.com.

Savings Snapshot

Total Project Cost	\$2480
Program Incentive	\$1,414
Customer Cost	\$1,066
Annual Savings	\$1061
kW Reduction	65
Payback Time	1 year

This program is a joint project of:







This program is funded by California utility customers and administered in parinership with Pacific Gas and Electric Company, Southern California Gas. Company, San Luis Obispo County and participating municipalities.



SLO Legion Hall,

Municipal Case Study

PROFILE

Location	805 Main Street in Templeton
Square Footage	6237
Upgrades	Lighting Retrofit
Completion Date	February 10, 2011



"I think they did a fabulous job."

Loretta Mazzo, Property Manager

Description

The SLO Legion Hall, built in 1962, serves as the center of activity for community events in Templeton. According to Loretta Mazzo, who manages events for the building, the hall is currently home to 4-H Club meetings, Girl Scout meetings, church events, bingo nights, and other events such as barn dances.

Through the San Luis Obispo Energy Watch, the building received lighting retrofits including replacement of F96T12 two lamp fixtures with energy saving FO96T8 two lamp fixtures. The project also replaced a 100 watt incandescent bulb with a 23 watt CFL fluorescent bulb and traded incandescent exit signs for more efficient LED exit signs. A wall mount sensor was installed in place of a light switch for even more energy savings.

The program's incentives covered much of the cost of the retrofits, resulting in a short payback time. Improvements made through the San Luis Obispo Energy Watch have lowered energy expenses and helped ensure that the building can continue to host a variety of community events while increasing environmental awareness.

Retrofits were completed through the Direct Install Program.

Qualifying PG&E customers may be eligible for an audit and natallation of several energy-efficient measures free of charge www.sloenergywatch.com.

Savings Snapshot

Total Project Cost	\$1043
Program Incentive	\$705
Customer Cost	\$338
Annual Savings	\$528
kW Reduction	.427
Payback Time	8 months

This program is a joint project of:







This program is funded by California utility customers and administered in partnership with Pacific Gas and Beotric Company, Southern California Gas Company, San Luis Obispo County and participating municipalities.

SLO CSD ENERGY CHALLENGE sloenergyalliance.org

SIX STEPS TO ENERY REDUCTION

Energy Baseline

- -Request a Rate Analysis from your Utility representative
- -Benchmark your facilities for energy use with the Energy Watch Partnership
- -Fill out wastewater questionnaire for your Utility representative

Energy Assessments

-Determine with Energy Watch and Utility

-Determine, with Energy Watch and Utility, which energy assessments need to be conducted for major facilities

Energy Strategic Plan
-Develop an energy strategic plan for your facilities with
Energy Watch and Utility (include any facility expansion needs for the
next ten years)

Financing Guidelines

-Work with Energy Watch and Utility to develop project financing guidelines (ex. appropriate financing methods)

Outreach
-Partner with Energy Watch to conduct two outreach campaigns to your residential customers regarding Energy Efficiency programs (ex. bill inserts)

Energy Saving Project

-Plan at least one energy saving project at your facilities by December 2014 and Energy Watch will give you a Kw kicker incentive (\$50 per peak kw, up to \$1,000)

For more information please contact: 781-5623 or energy@co.slo.ca.us









Take the San Luis Obispo County Energy Watch ENERGY SAVINGS CHALLENGE TODAY

Pay a one-time fee of \$25 and receive immediate and future savings

- Commercial Energy Assessment of your facility
- Report recommending upgrades that save energy and lower costs
- Payback analysis identifying cost-benefit of recommended upgrades
- Installation of energy-saving lighting:

Replacement of incandescent bulbs with compact fluorescent bulbs (CFLs) in all hardwired fixtures (Mini-spirals up to 25-watts are available)

- Installation of specialty CFLs, such as floods and vanity globes
- Installation of one LED OPEN sign to replace one non-LED OPEN sign

San Luis Obispo County Energy Watch Energy Savings Challenge guarantee

"If we don't find a minimum \$200 in energy savings opportunities for your business, the Commercial Energy Assessment is free!"

\$25 Commercial Energy Assessment and start saving!

Visit www.staplesenergy.com or call Staples Energy at 1-888-324-0930







SAN LUIS OBISPO COUNTY energy watch

Energy Efficient Business Program

Pecific Ges and Electric Company (PG&E), San Luis Obispo County Energy Welch and Staples Energy have collaborated to help PG&E's commercial customers realize immediate and long-term energy savings. Reducing energy paves the way to lower operating costs and a better profit margin.

Participating business oustomers will receive the following reports:

- Assessment of their savings opportunities
- Recommendations for energy efficiency equipment
- Estimate of the energy and money that could be saved by having the equipment installed
- Instant Payback Analysis



San Luis Obispo County Energy Watch

is a joint program of Pacific Gas and Electric Company, the County of San Luis Obispo and participating municipalities. For more information about the other energy efficiency programs and services available from PG&E visit: www.pge.com/savemoney



These Types of Business Benefit Greatly From Participating:

- Restaurants
- Gas Stations
- Convenience Stores
- Markets
- Liquor Stores
- Orocery Stores
- Refrigerated Warehouses
- Retail (large, multi-story and small)

Available Measures Include:

- LED reach-in cooler and freezer lights (6' and 5')
- Anti-sweat controls for freezer and cooler
- Evaporator fan motor and controls
- Auto door closer/essist for freezer and cooler
- TLEDs 4*
- Exterior LEDs
- LED lamps (A19, BRs, candles)
- T5 Hightbays
- T8 (4" and 8")
- Vending misers

This program is funded by California
Utility Oustoners and administered by
POSE under the suspices of the California
Public Utilities Centralson. "POSE"
refers to Pacific Ges and Electric
Campany, a subsidiery of POSE
Campanies.

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Start saving! Contact Staples Energy for an energy efficiency assessment
1-888-324-0930 or 1-805-952-1302



County of San Luis Obispo Central Plant Cooling System Upgrades









As part of its Sustainable Solutions Turnkey (SST) Energy Efficiency Project, the County of San Luis Obispo upgraded the cooling system at its downtown Central Plant.

Project Overview:



The central plant services the: **New Government Center County Library County Courthouse Old Government Center**

Energy efficiency upgrades included:

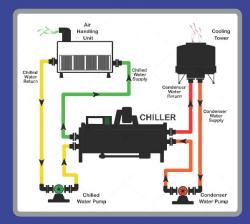
- Two new primary system pumps
- New integrated Delta Energy Management and Control System (EMCS)
- Two new 250-ton centrifugal chiller units

New Chiller Units



The chiller units cool and circulate water to County Government Complex buildings. Air handling units move air over the chilled water pipes and distribute this cooled air through the buildings, providing improved thermal comfort for County employees.

Cooling System



Project Best Practices

This complex multi-departmental initiative employed the following best practices:

- 1. Collaboration, Coordination and Communication
- 2. Leveraging Public-Private Partnerships
- 3. Leveraging Design-Build Project Implementation
- 4. Utilizing multiple financing sources including 0% On-Bill Financing and 1% California Energy Comission loans

Annual Savings:

\$42,700



122,823 kWh 7 24 MTCO2e





This program is funded by California utility ratepayers and administered by Southern California Gas Company, Southern California Edison and Pacific Gas and Electric Company under the auspices of the California Public Utilities Commission.

ENERGY EFFICIENCY PROJECTS



Margaret Mayfield Email: mmayfield@co.slo.ca.us

The County of San Luis Obispo and PG&E are engaged in a public-private partnership to implement design-build energy efficiency projects at County facilities - the Sustainable Solutions Turnkey (SST) project. Our goal is to decrease the County's costs, energy use and greenhouse gas (GHG) emissions.

PROJECT OVERVIEW







A total of 8 projects at over 20 facilities are currently being implemented including lighting, heating and cooling, and energy management and control upgrades. Over 60% of the project costs are funded by utility incentives and non-county funds.

PROJECT RESULTS

\$334,000



ANNUAL SAVINGS

The energy efficiency projects are projected to generate over \$330,000 annually in energy and operational cost savings.

686 Co2



31,545 TREES PER YEAR



The projects will decrease the County's energy usage by 1.6 MWh and reduce its Carbon Footprint by 686 metric tons annually – equivalent to removing 151 passenger vehicles from the road or planting 31,545 trees per year!

SAN LUIS OBISPO COUNTY watch

WHO WE ARE

The County of San Luis Obispo's Energy Watch program is a partnership between the County, Pacific Gas and Electric Company, Southern California Gas Company, and participating cities and Special Districts.

WHAT WE DO

The Energy Watch Partnership works with local governments, businesses, and contractors to help customers reduce energy cost, use, and demand, and decrease greenhouse gas emissions.

LOCAL GOVERNMENT AGENCY ENERGY MANAGEMENT PROGRAMS

- Benchmarking
- Energy Assessments
- Technical and Engineering Support
- Project Management
- On-Bill Financing
- Grant and Loan Support
- Budget & Capital Improvement Plan Development
- Bid Solicitation and Procurement Support
- Incentive and Rebate Coordination

SMALL TO MEDIUM SIZE BUSINESS **DIRECT INSTALL**

- Energy Assessments
- Recommendations for Energy Efficient Equipment
- Energy and Cost Savings Estimates
- Incentive and Rebate Coordination

COMMUNITY CLIMATE SERVICES

- Climate Action Planning, Monitoring, and Implementation
- Technical Assistance to Local Government Agencies
- Climate Change Outreach
- Grant Writing Support









MUNICIPAL ENERGY MANAGEMENT **PROGRAM**

WHO WE ARE

The County of San Luis Obispo's Energy Watch is a partnership between the County, Pacific Gas and Electric Company, Southern California Gas Company, and participating cities and Special Districts. Energy Watch works closely with cities to reduce energy use and costs of facilities and infrastructure.

WHAT WE DO

We provide local government agencies with energy management services including monitoring, engineering and technical support, and incentive coordination.

CONTACT US

Name: Jordan Garbayo Email: jgarbayo@co.slo.ca.us Phone: 1-805-781-5982









This Program is funded by California utility ratepayers and administered by Southern California Gas Company, Southern California Edison and Pacific Gas and Electric Company under the auspices of the California Public Utilities Commission.

SERVICES WE OFFER

- Benchmarking
- Audits/Energy Assessments
- Technical and Engineering Support (\$250K for 2017)
- Project Management Support
- On Bill Financing
- Grant and Loan Support
- Budget & Capital Improvement Project Development Support
- Incentive and Rebate Coordination
- Direct Install

FOR

FRESHWATER AND WASTEWATER INFRASTRUCTURE

- Aeration Systems
- Motor and Pump Efficiencies



- HVAC and Refrigeration Efficiencies
- Lighting
- Gas Equipment Efficiencies
- Kitchen and Food Service Efficiencies

PROGRAM HIGHLIGHTS

ENERGY BASELINING AND BENCHMARK

Energy Use and Cost Analysis Reports

Buildings and Public Facilities Freshwater and Wastewater Infrastructure

Municipal **Energy Reports**

300 Buildings and Facilities Analyzed

Completed CivicSpark Support

for City Projects

RATE ANALYSIS

- Savings through Rate Changes
- Roughly \$11,000 in savings/city/year
- Annual Rate Analysis Updates

\$192,000

in potential annual savings across all cities

