## Driving Energy Savings in Businesses Through Behavioral Changes and Business Licenses

SEEC Forum | June 15, 2017







#### City of Chula Vista FREBE Program

SEEC Forum

June 15, 2017

By Barbara Locci

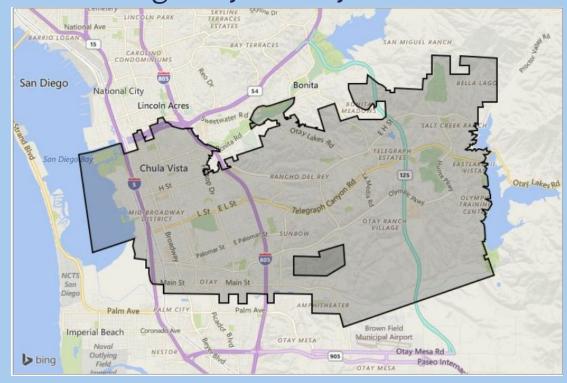


## The City of Chula Vista

- \* 243,916 Residents
- \* 12,000 Businesses

\* Extends from the San Diego Bay to Otay Lakes and the

mountains





## Program Overview



- Free Resource and EnergyBusiness Evaluation
- \* Adopted in Chula Vista in 2009
- Part of the Climate Action Plan
- \* Economic Development



## Mandatory Evaluations

- \* The FREBE Program Began as Voluntary
- \* The Evaluations Transitioned to Mandatory in 2009
- \* Stakeholders were involved in the Drafting of the Ordinance
- \* The Ordinance Was Amended in 2015 Taking Out the Fine for Non-Compliant Businesses
- \* Some Businesses Are Exempt: Home Based and Mobile
- \* Our Team Evaluates About 600 Businesses Every Year

## **Relationship With Other Programs**

- \* Chula Vista CLEAN Business Program
- \* Voluntary and Co-funded
- \* More Comprehensive



## **Program Characteristics**

- \* Goal to Save Energy and Reduce GHG Emissions
- \* Trained Staff from the City of Chula Vista Conducts Evaluations
- FREBE Program to Provide Leads to Utility Programs and Contractors





### **FREBE Process Overview**

Setting the Appointment

Visiting the Business

Making Recommendations in the FREBE Report

Connecting Utility Programs



## Setting the Appointment Part I

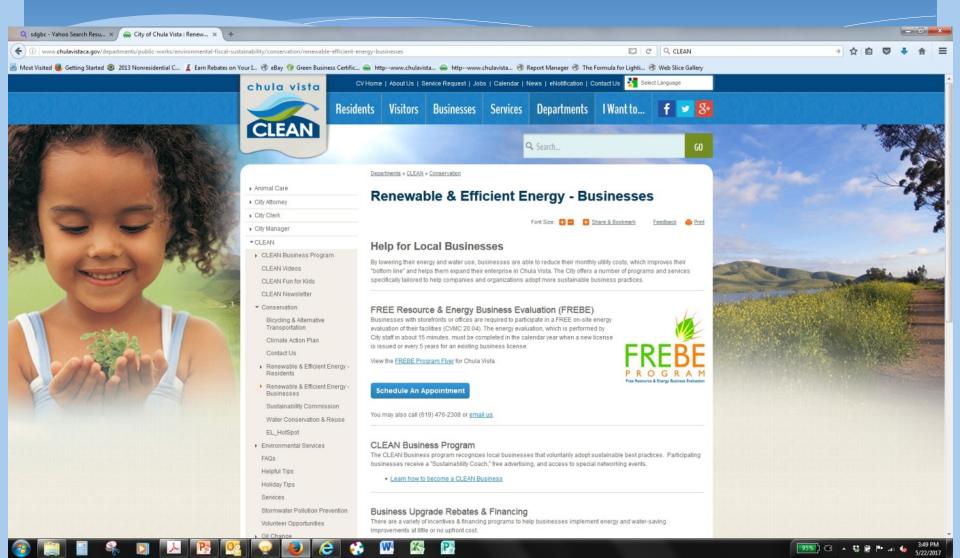
- Businesses Are Selected From a Previously Compiled Five Phases List
- Letters Are Mailed With License
   Renewal Notices

http://www.chulavistaca.gov/home/sh owdocument?id=2394

	Contact Name		
Alarm Company			
	Business Name		
	OFFICIAL USE ONLY		
	ROUTE TO: BLDG/PLN CVPD		
	□ FIRE □ STW	\ '	
	New office / storefront businesses must participate in a free energy & water evaluation to help you save money (see FREBE flyer)	Sd	
	Schedule an appointment (within 60 days) at www.chulavistaca.gov/clean or (619) 409-3893	Vend	
	Preferred date/time?	Vic	
	On-Site Contact (required)	Ar	
١	Name:		
	Phone:	Hot	
	Enail:		
	I declare under penalties of perjury that this application is true a accordance with all applicable Federal, State and City laws and for denial or revocation of this business license.		
	Signature of Owner or Representative:		
	RETURN APPLICATION TO ABOVE ADD	RESS A	



## FREBE Web Page



## Setting the Appointment Part II





Get a REE on-site energy and water evaluation of your facility (a \$300 value) when a new business license is issued, or every four years for an existing license if your business has a storefront or offices! The evaluation can be completed by Conservation Specialists in abour 30 minutes. Set up your appointment today!





#### What are the benefits?

- FREE assistance identifying ways to reduce energy and water costs
- FREE energy and water rebate assistance and 0% interest financing options for qualified projects and customers
- No-cost compact fluorescent light bulbs, FREE "smart" power strips or other devices
- FREE training on ways to easily track energy and water costs
- · Notices regarding FREE business-specific services and rebates
- · Comprehensive report upon completion



#### Make an appointment!

Visit www.chulavistaca.gov/clean and go to the online calendar to schedule your appointment, or call (619) 409-3893.

For more information about the program or ordinance, please contact the Department of Conservation & Environmental Services at (619) 409-3893 or email Conservation@chulavistaca.gov

#### It really works!

We've built a partnership with the City of Chula Vista on becoming "green." It is incredible how much they have saved us on our utility bills! Seeling all that savings going to our bottom line is awesome."

— Red Lobater, Chula Vista

We were happy to try anything to save energy. The evaluation really helped out our costs! We are also please with the brighter lights and the great selection of bulbs.



This program is funded by California rate payers under the auspices of the California Public Utilities Commission.



\* Appointments Are Set Over the

Phone or with Further Notices

How we handle Non-Compliant
 Businesses



## Visiting the Business





## Making Recommendations



**Energy Efficiency** 



Water Conservation



Renewables



Financing



**CLEAN Business Program Participation** 

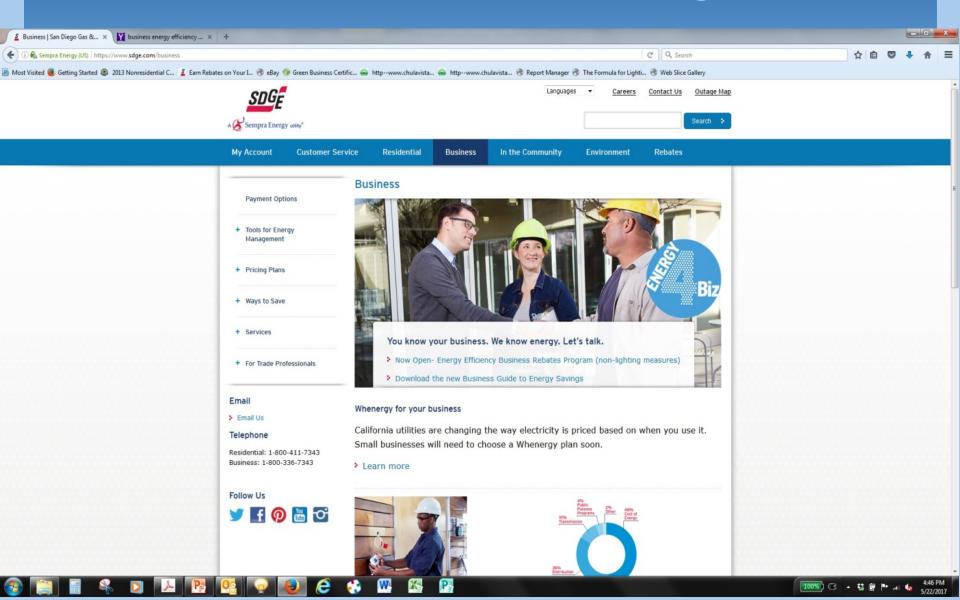


## **Utility Programs**

- \* We Recommend Businesses to current SDG&E Programs:
  - a) Business Energy Solutions
  - b) On Bill Financing
  - c) Rebates and Incentives



## SDG&E Business Page



## Lessons Learned

\* Business License vs Facility Address

- \* Reaching Businesses on time and customer service
- \* No Cost Measures vs Requiring a Co-Pay





## Let's Evaluate a Business

\* Please Take a Look at the FREBE Form on Your Table

#### **Evaluation &** Recommendations

No cost or low cost improvements and more!

#### **LOW COST**

RECOMMEND  $(\checkmark)$ 

#### **Energy Efficiency Measures**

#### Refrigeration

Section 1997 Section 1997 (1997)	
Gaskets	
Strip curtains	
Insulation on bare suction lines	
Occupancy sensors for walk-in lights	
Auto-closers for main cooler/freezer doc	ors
LED Case Lighting	

#### Lighting

T-12 to T-8/T-5 retrofits	
Compact fluorescent lamp (CFL) or LED	
Occupancy light sensors or time clocks	



#### INVESTMENT

RECOMMEND  $(\checkmark)$ 

#### **Energy Efficiency Measures**

#### Cooking

Install blast chiller

Cooking		
Gas or electric fryer		
Gas or electric griddles		
Insulated holding cabinet		
Gas or electric steamer		
Gas or electric convection/ combination oven		
Refrigeration		

Solid or glass door reach-in refrigerators

#### **NO COST**

RECOMMEND  $(\checkmark)$ 

**Energy Efficiency Measures** Energy Waves online tool (SDG&E)

Summer Saver Program (SDG&E) Thermostat settings:

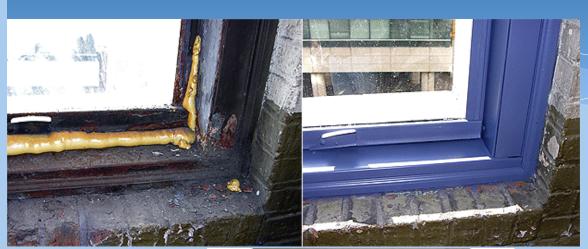
Cool @ ≥78, Heat @ ≤68

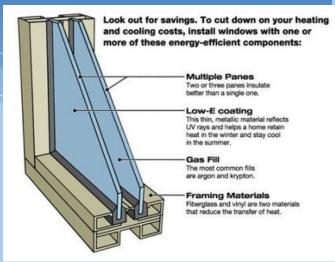
## The SEEC Forum Restaurant





# Windows, Lamps, and Seals







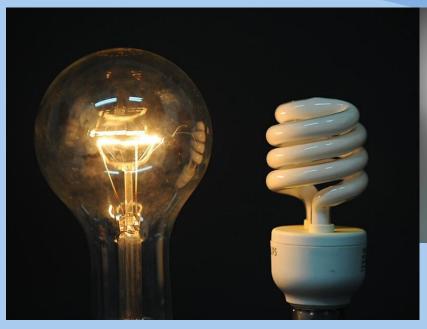


Sitting Area





## Lighting







## **HVAC**









## The Kitchen Area





## **Energy Star and Refrigeration**



## Questions?



Commercial and industrial buildings account for nearly half of our nation's energy use.

We set out to change that.

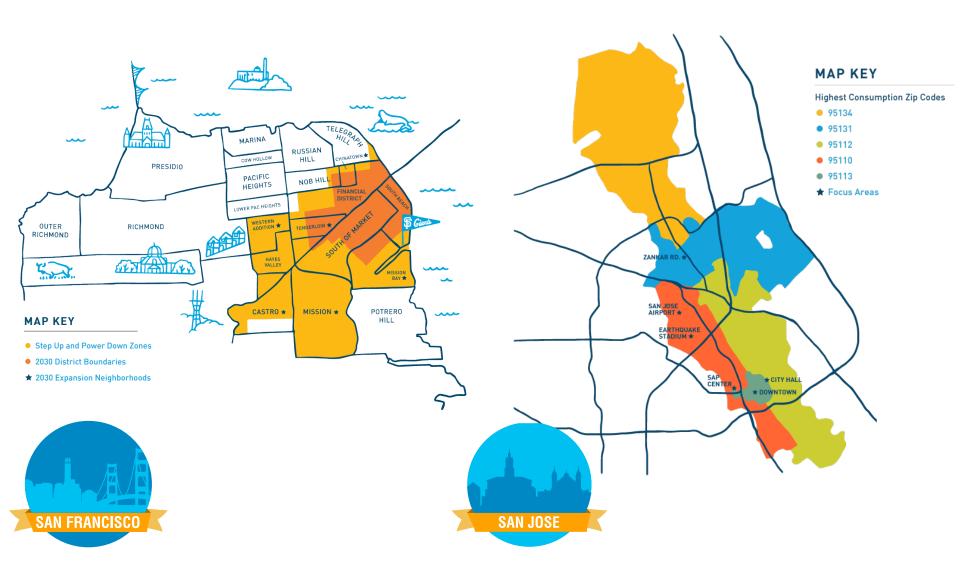




# Simple Changes BIG Savings











"By pledging to Step Up and Power Down, we are taking another move towards achieving part of our Green Vision goals to cut our per capita energy use in half."

Sam Liccardo Mayor of San José



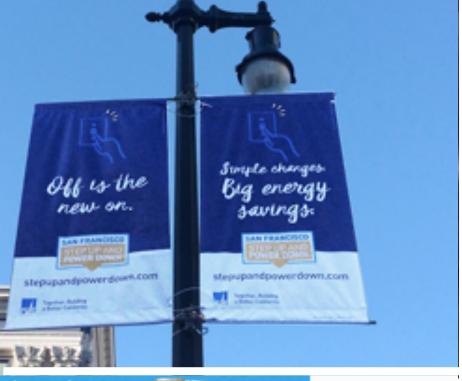




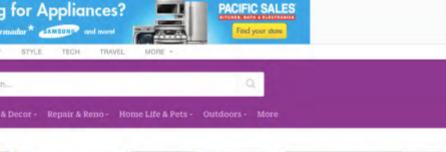
"We have to do even more to meet our ambitious climate goals. With our pledge today, we are taking another step to unite businesses in our city to take action with Step Up and Power Down."

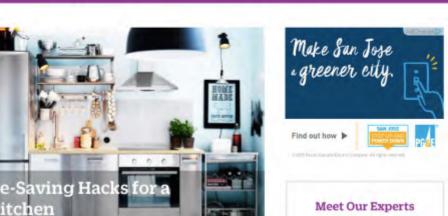
**Edwin M. Lee Mayor of San Francisco** 



















## Simplicity + choice = action

We employed easy actions and robust tools, allowing us to meet customers where they were and continue to move them along in their energy-efficiency journey.









#### **TRAINING**

- REV Sustainability Circle
- Operations and Maintenance Training
- Energy Champion Training

#### **ENERGY AUDITS**

- Environmental Practices Inventory
- Engineering Audit
- Business Energy
   Checkup

## BEHAVIOR CAMPAIGNS

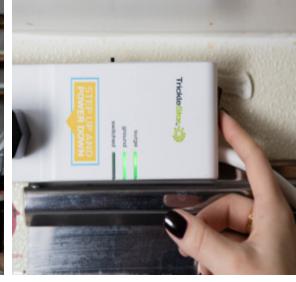
- Campaign Toolkits
- One-pagers
- Posters/Collateral
- Email Templates
- Other Behavioral Changes

## FACILITY UPGRADES

- Retrofits
- Rebates and Incentives
- Direct Install Projects

























## We deeply engaged customers by meeting their needs.

We offered choices, supporting tailored energy savings action plans best suited to each participant, anchored in behavior science to drive and better sustain adoption.







664 ENGAGEMENTS
(ENERGY SAVING CHECKLIST)

130 DIRECT INSTALL PROJECTS (50% INCREASE);
50% ACTIONS TAKEN





### Our partnerships with the cities supported deep engagement.









#### **KICK-OFF**

San Francisco and San José announced the initiative at the U.S. Conference of Mayors

#### **INCENTIVE AWARD**

Each city received \$1.25M of PG&E shareholder funds for achieving their goals, to support local energy-efficiency projects

# CITY DEPARTMENTS

SF Environment and San José ESD staff set the grassroots tone, personally engaging small business customers

#### COMMUNITY SUPPORT

City governments and local organizations helped drive momentum and spread the word.





# Plan your own Behavior Campaign

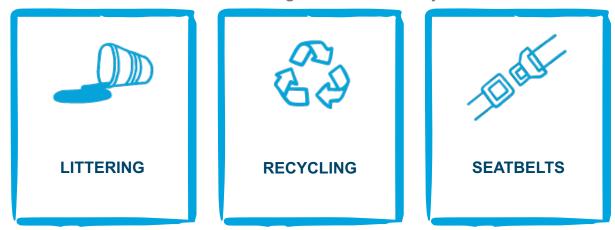
Workshop



## Step 1: Pick a Behavior

Up to 6% energy savings can be achieved through making simple changes\*

Think of behavior changes in the last 25 years...

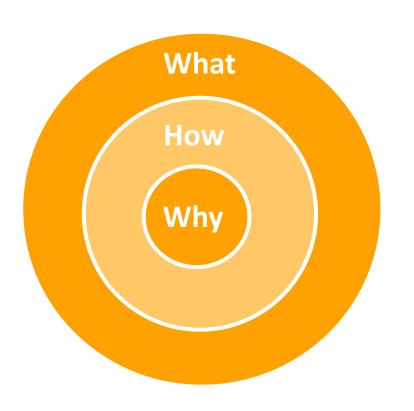


**What's next in energy conservation?** As buildings become more efficient, the next wave in energy efficiency is improving the way people interact with them.



## Step 2: Create a Compelling Message

Determine WHY your coworkers should change their behavior



"People don't buy what you do, they buy why you do it."

– Simon Sinek



## Step 3: Choose your Campaign

Our engagement campaigns are rooted in behavior science and offer fun and inspiring ways for businesses to engage their employees in simple energy saving actions.











#### **Adopt A Light**

Employees adopt and care for light switches, turning them off at the end of the day and when not in use.

#### **Power Down: Unplucked!**

Employees power down workstations at the end of the day or they receive a rubber chicken as a reminder.

#### **Energy Vampire Slayer**

Employees unplug energy vampires at the end of the day, or they receive a set of spooky fangs as a reminder.

#### **Sweet Goodnight**

Employees power down workstations and receive a sweet treat on their desks in the morning.





## Case Study: City of San José



- 4 floors at San Jose City Hall participated in the Vampire Slayer campaign.
- We leveraged members of the interdepartmental green team as floor ambassadors.
- 142 of 334 employees participated, or about 43% of the floors' total occupants.
- At the pre-assessment, 42% of participants left at least one electronic on in their workstation at the end of the day.
- By the end of the campaign, the rate dropped to 11%.
- If participants good habits continue, the campaign will successfully save those floors over 13,000 kWh of energy and about \$2,000 per year in utility costs!
- Recognized participants who performed the best, improved the most, and all ambassadors and staff who helped run the campaign.





## Step 4: Plan for Success

	Core PRINCIPLES of Behavior Change in Energy Conservation	How You Can USE the Principles to Create Success for Your Organization
Jan 6	PUBLIC AND WRITTEN COMMITMENTS TO ENERGY EFFICIENCY Making your energy commitment public will "take root" in a way that private commitments don't. [public commitments]	ENGAGE LEADERSHIP Encourage leaders to recognize outstanding performers publicly. Employees are known to engage when leadership sets the standard.
(28)	MAKE ENERGY EFFICIENCY THE NEW NORMAL Beliefs about what others are doing, approve of or disapprove of, are hidden factors driving most of the behavior in your workplace.  [social norms]	BENCHMARK Competitions or visible comparisons relative to others in the company or the industry can be powerful motivators.
gg:	TAKE SMALL STEPS Build momentum by taking small steps for quick wins, reinforcing the "new normal".  [foot in the door]	PERSONALIZE IT Choose activities that best apply to participants, encouraging easy successes and greater uptake. Publicly recognize success.
V	KEEP IT SIMPLE When people have to make too many decisions, they most often default to doing nothing.  [choice overload]	FOCUS ON ONE ACTION AT A TIME Choose from lighting, plug load, heating and cooling or water – then pick another energy reducing area.
TEP UP AND	GIVE THEM FEEDBACK Making people's energy use visible helps them associate their actions with certain outcomes, encouraging greater efficiency. [feedback]	RECOGNIZE HIGH PERFORMERS Step Up and Power Down encourages businesses to visibly recognize high performers in front of their peers.

Source: Empower Efficiency 2016

# Thank you!

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