



Efficiency First! @ Work

Presentation

April 26, 2010

Santa Clarita City Hall

Topics of discussion

- CEP Overview
- Energy Saving Programs
 - Energy Efficiency
 - Financing
 - Demand Response
 - Renewable Energy
- Benchmarking
- Q&A



Our Mission

Efficiency First!

To deliver effective energy efficiency programs that



forge positive relationships,

motivate communities to reduce environmental impacts and



promote sustainable cities.

We accomplish this by...

- **Help Save Resources & Reduce Utility Bills**
 - ➔ Electricity
 - ➔ Gas
 - ➔ Water
- **Provide Energy Efficiency Services & Education**
 - ➔ Smart Energy Management Education
 - ➔ Promotion of Utility & City Programs
 - ➔ Municipal Energy Efficiency Actions
- Funded by California customers through the California Public Utilities Commission

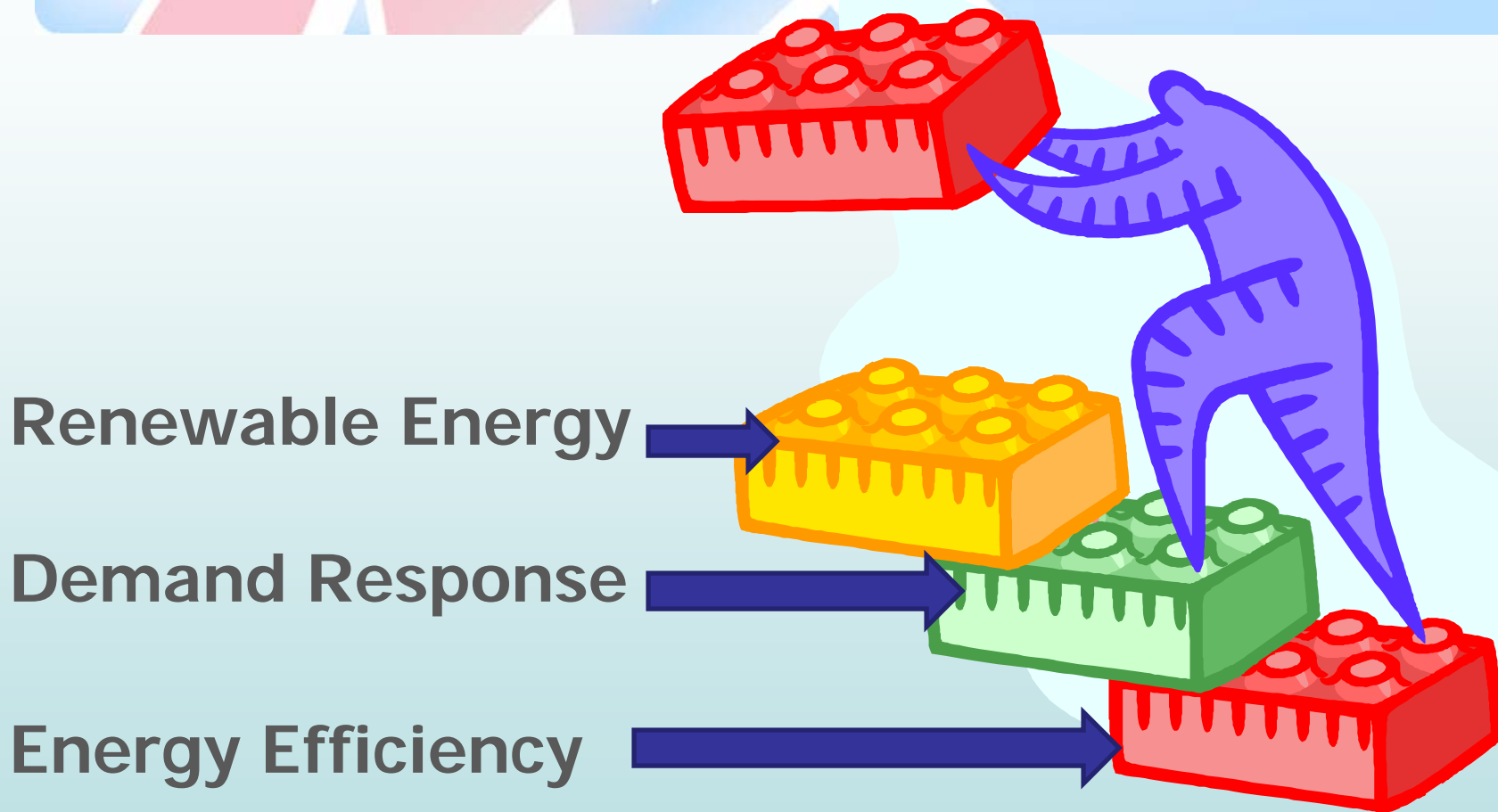


Topics of discussion

- ✓ CEP Overview
- Energy Saving Programs
 - ➔ Energy Efficiency
 - ➔ Financing
 - ➔ Demand Response
 - ➔ Renewable Energy
- How to get started with benchmarking
- Q&A



Loading Order



Utility Customer Programs

- There are several programs available to you as a Southern California Edison (SCE) & Southern California Gas Company customer.
- Most programs must be applied to individually.
- You pay for them so you should take advantage of them!

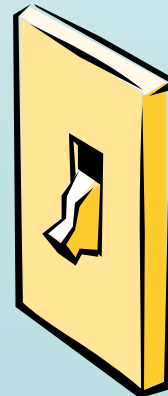
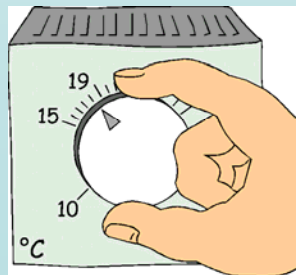
What is Energy Efficiency?

Energy Efficiency = Using technologies to reduce overall energy consumption



VS.

Energy Conservation = modification of consumption patterns to reduce overall energy consumption



Energy Efficiency Programs

Energy Assessment / No-Cost modifications

- Energy Surveys
 - offered online through SCE & SCG
- SCE Direct Install – Coming to Santa Clarita November & December 2010
 - Receive up to \$10,000 in energy efficient upgrades
 - Small to medium businesses ONLY

Energy Efficiency Programs

Low-Cost Modifications

Rebates

- Express Solutions (SCE)
- Energy Efficiency Rebates for Business (SCG)
- Food Service Equipment Rebates (SCG)



Energy Efficiency Programs

Energy Efficiency Retrofits



Performance-based Incentives

- Customized Solutions (SCE)
- Energy Efficiency Calculated Incentive Program (SCG)
- Retro-commissioning (SCE/SCG)
- Savings by Design (SCE/SCG)

Energy Efficiency Programs

Energy Efficiency Retrofits

Financing

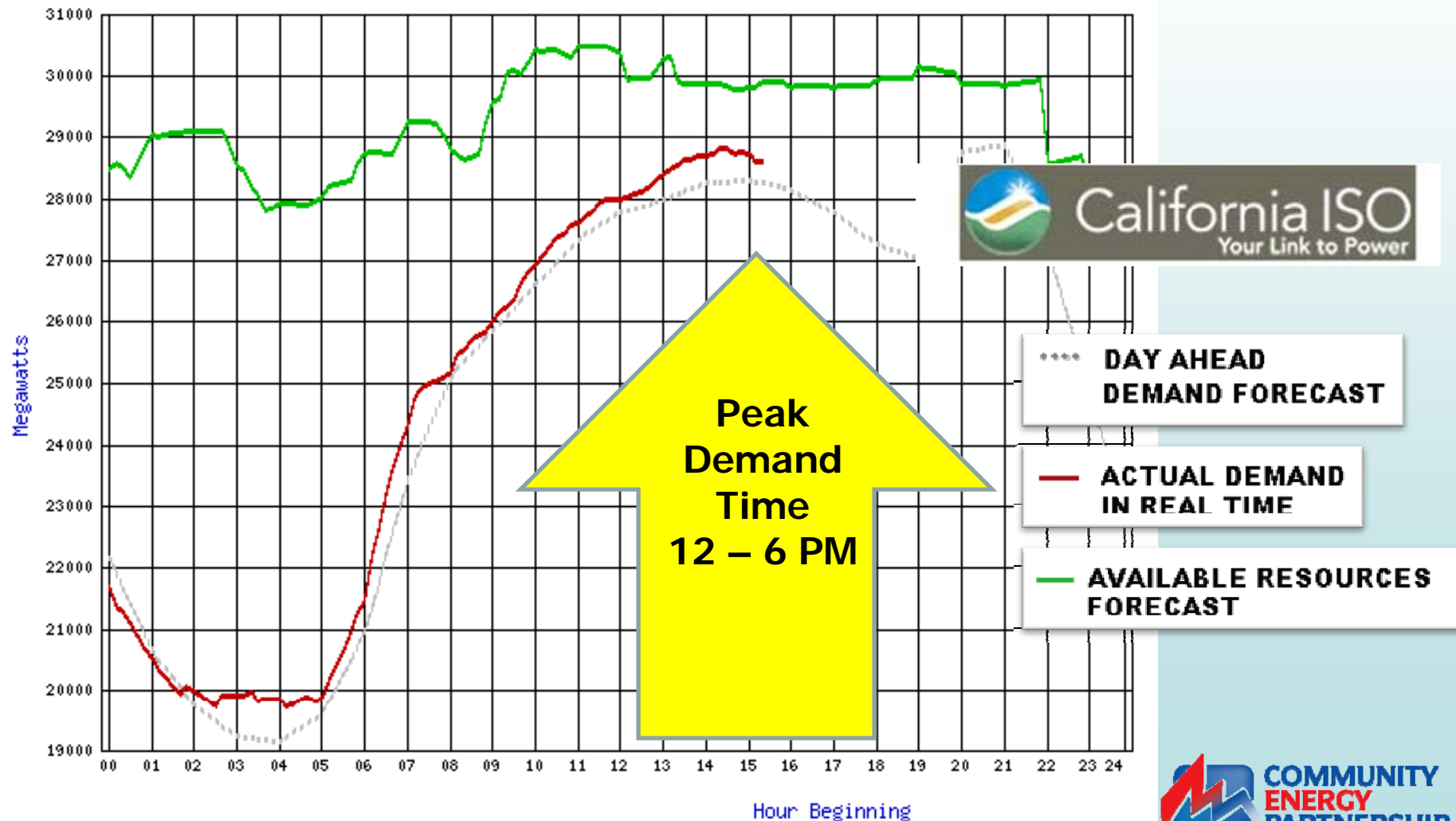
- On-Bill Financing (SCE & SCG)
 - 0% financing
 - \$5,000 to \$100,000 per meter
 - Project must have a payback of 5 years or less
 - Monthly loan payments billed on utility bill
 - **Available until funds run out**



Topics of discussion

- ✓ CEP Overview
- Energy Saving Programs
 - ✓ Energy Efficiency
 - ✓ Financing
 - ➔ Demand Response
 - ➔ Renewable Energy
- Benchmarking
- Q&A

Demand Response



..... DAY AHEAD DEMAND FORECAST

— ACTUAL DEMAND IN REAL TIME

— AVAILABLE RESOURCES FORECAST



Demand Response

- Demand Response is the action of reducing short-term energy use through immediate conservation efforts.
 - e.g. turning of unneeded lights, turning down A/C
- These programs are designed to encourage a reduction of energy use during times of need.

Demand Response Programs

- Demand Bidding Program
 - ➔ No penalties
- Technical Assistance & Technology Incentives (TA/TI)
- Critical Peak Pricing

Topics of discussion

- ✓ CEP Overview
- Energy Saving Programs
 - ✓ Energy Efficiency
 - ✓ Financing
 - ✓ Demand Response
 - ➔ Renewable Energy
- Benchmarking
- Q&A

Renewable Technology

Energy generated from natural resources that will never be depleted.

- Solar Thermal



- Solar Photovoltaic



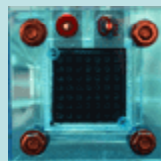
- Wind



- Geothermal



- Fuel Cells



Renewable Energy Programs

Self Generation

- California Solar Initiative (SCE)
 - ➔ Solar Photovoltaic (SCE)
 - ➔ Solar Thermal – water heating (SCG)
- Self Generation Incentive (SCE & SCG)
- Rate Option R (SCE)

For Additional Training & Education



- Customer Technology Application Center (CTAC) www.sce.com/ctac
- Energy Resource Center (ERC) www.socalgas.com/business/resourceCenter/ercOverview.html

Steps to saving energy, money & the environment

- ✓ Energy Efficiency Assessment
 - Online Survey
 - Benchmarking
- ✓ No cost/low cost modifications
 - Rebates
 - Behavior
- ✓ Energy Efficient Retrofits
 - Incentives
 - Financing
- ✓ Education to employees
 - CTAC/ERC
- ✓ Ongoing operations & maintenance
- ✓ Self Generation
 - Incentives



Topics of discussion

- ✓ CEP Overview
- ✓ Energy Saving Programs
 - ✓ Energy Efficiency
 - ✓ Financing
 - ✓ Demand Response
 - ✓ Renewable Energy
- Benchmarking
- Q&A

Benchmark Analysis



Section V. of the Application states:

*“Successful applicants will be required to conduct a **benchmark analysis** of annual energy consumption and provide a report of the final energy savings as a result of the proposed project using ENERGY STAR Portfolio Manager.”*

Benchmarking

- Benchmarking is the process of documenting a building's energy use over time.
- A tool to track and compare the energy use of commercial buildings by comparing the energy consumption per square foot of floor space to other buildings of similar use.
- This can lead to a better understanding of the energy performance of a facility.
- Similar to **mpg** when looking at automobiles at the dealership.

Why Benchmarking?

- “What isn't measured, isn't managed”
- Public facilities suffer from a lack of investment and often waste up to 30% of their energy consumption.
- Most Facility Managers have no reference point other than their own historical data.
- Commercial Building Energy Consumption Survey (CBECS) which is updated every four years.
- Regulation (AB 1103, AB 32, etc...)



It's the law...

AB 1103 states that nonresidential building owners & operators must...

“...disclose ENERGY STAR Portfolio Manager benchmarking data and ratings, for the most recent 12-month period, to a prospective buyer, lessee, or lender...”

This goes into effect January 1, 2011

ENERGY STAR Portfolio Manager



- It's free!
- Tracks all forms of energy usage and water consumption
- Proven track record
 - State of California
 - City of Los Angeles
 - Kohl's
 - Marriott
- Uses standard easy to understand metric (1-100)
- ENERGY STAR® Label
- SCE and SCG will updated monthly and historical data (Automated Benchmarking Service)
- LEED for Existing Buildings: Operations & Maintenance
- AB 32 GHG emissions Tracking



What building types will receive the ENERGY STAR Score?



- Offices
- Retail Stores
- Bank/Financial Institutions
- Schools K-12
- Wastewater Treatment Plants
- Residence Halls/Dormitories
- Religious Worship
- Multifamily (exclusions)
- Courthouses
- Hotels
- Supermarkets
- Medical Offices
- Warehouses (refrigerated and non-refrigerated)
- Hospitals (acute care and children's)

Earn the ENERGY STAR label

- 1-100 ENERGY STAR Score is based on percentile of energy performance
- The top 25% performing buildings nationwide are eligible to earn the ENERGY STAR
- Buildings that earn a 75 or higher can apply

ENERGY STAR buildings



ENERGY STAR Buildings in Santa Clarita:

- Lyons Plaza 23502 (Office, 2001)
- Kohl's Valencia (Retail, 2009)
- Bel Air Lighting (Warehouse, 2007 & 2008)
- Summit at Valencia 1-3 (Office, 2007 & 2008)
- The Commons (Office, 2008)
- Tourney Pointe (Office, 2005)
- Valencia Town Center Buildings (Office, 2004)
- Sunset Pointe Plaza (Office, 2001 & 2002)

How to get started



1. Visit: www.energystar.gov/benchmark
2. Create a Portfolio Manager Account
3. Add a new facility
4. Add space types
5. Input meter information, e.g. Electric & Natural Gas
6. Sign up to receive historical upload and monthly updates of energy use data
(optional)



Requesting an Energy Performance Report



- Request an Energy Performance Report on the “My Portfolio Page”
- A minimum of twelve months of historical energy use is needed to create a **Energy Performance Report** through Portfolio Manger
- Two Methods to collect energy use data:
 - ➔ Manual input
 - ➔ Sign-up for **Automated Benchmarking Service** through SCE and The Gas Company

Automated Benchmarking Service



- Need to sign up separately through Portfolio Manager for both SCE and So Cal Gas
- Automatically loads 12-36 months of historical energy use
- Automatically uploads monthly energy use moving forward

Questions about Portfolio Manager



Do not contact the City of Santa Clarita with questions about Portfolio Manager!

Direct ENERGY STAR Portfolio Manager questions to: buildings@energystar.gov

Many questions can be answered through the **help** feature on the website.



Websites



- Southern California Edison www.sce.com
- Southern California Gas Company
www.socalgas.com
- Green Santa Clarita
www.greensantaclarita.com
- ENERGY STAR
www.energystar.gov

QUESTIONS & ANSWERS

Any questions



Laurel Faulkner, LEED AP O+M
Project Analyst, The Energy Coalition

lfaulkner@energycoalition.org

949-701-4646, x21

www.communityenergypartnership.org

