

# Energy Upgrade California Multifamily Program

*LGC Statewide Energy Efficiency  
Best Practices Forum  
July 19<sup>th</sup> 2012*



MULTIFAMILY  
PROGRAM



# Agenda

- EUC Local Government Multifamily Programs
- EUC in Alameda County Multifamily Program
- Statewide Multifamily Resources
  - Program Design Recommendations
  - Workforce Development
  - Marketing Materials
  - Web Portal & IT Tools

# Understanding CA's Multifamily Market

- Approx. 1/3 of households reside in MF
- > 70 % of MF constructed before established building energy efficiency codes
- A 25% energy upgrade of ~350,000 dwellings = removing 80,000 passenger vehicles from road
- MF Retrofit Challenges & Opportunities
  - Building types
  - Financing
  - Split incentives
  - Trigger events
  - Cost-effective energy savings measures

# Solutions to overcome participation barriers

- Education/awareness
- Technical assistance
- Rebates/incentives
- Professionals training
- IT tools
- Financing

# Energy Upgrade California – Multifamily Programs



- Sacramento County
- Alameda County
- San Francisco County
- Los Angeles County
- San Diego County

# Energy Upgrade California – Multifamily Programs

Program Elements	Alameda County	Los Angeles	San Francisco	Sacramento (SMUD)	San Diego (SDG&E, local)
Technical Assistance	✓	✓	✓	✓	✓
Energy Assessment Rebate		✓		✓	✓
<b>Upgrade Rebate</b> Min. energy efficiency improvement		✓ Min = 10%	✓ Lighting, Lighting Control, Appliances & Weatherization	✓ Min = 20%	✓ Min = 10%
Green Labeling Rebates	✓	✓			
Expiration Date	June 2013	June 2013 Fully Subscribed	On-going	March 2012 Extension Pending	June 2012 Extension Pending



# EUC in Alameda County Multifamily Program

Technical Assistance  
Green Labeling Rebate

# EUC in Alameda County: Technical Assistance

- Energy Upgrade pays for a professional consultant to:
  - Provide recommendations on upgrades
  - Identify applicable programs
  - Assist with GreenPoint Rated checklist
  - Provide customized help as needed (e.g., product comparisons, utility bill tracking, etc.)
- Menu of services available at  
[Multifamily.EnergyUpgradeCA.org](http://Multifamily.EnergyUpgradeCA.org)

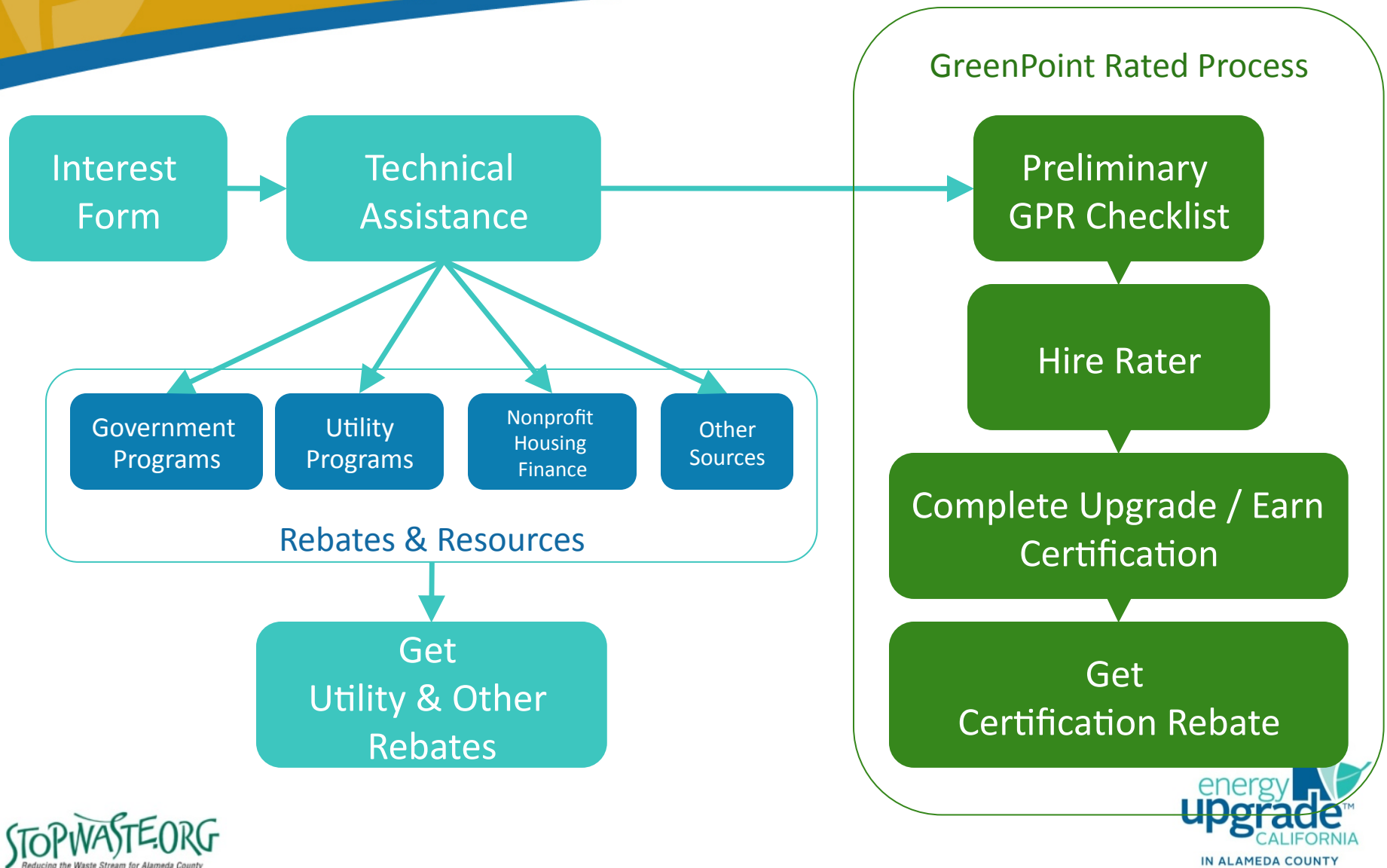




# EUC in Alameda County: Green Labeling Rebates

- \$3,000 – 30,000 assessed on case-by-case basis:
  - Number of units
  - GreenPoint Rating
- Designed to offset:
  - Third-party Rater fees (rate dependent on market)
  - Certification fees (\$500 /project + \$100 /add't bldg)
  - If rebate exceeds costs, property owner keeps balance
- Paid in 2 installments:
  - 20% upon hiring Rater
  - 80% upon certification

# Participate Process



# Case Study: Posada de Colores

- Weatherized external façade
  - Repaired water/air infiltration leaks, replaced joint seals
- Dual pane, low-e windows
  - U-Factor: 0.31, SHGC: 0.33
- Domestic hot water & space heating boilers
  - 94% efficiency
  - New hydronic pipes, pipe insulation
  - Distribution system replacement: pumps, motors, fan coils, wiring, panels, controllers
- Elevator replacement
- High-efficacy lighting
  - Dwelling units
  - Common areas

100 affordable housing units  
for seniors (all occupied)

Built in 1976 (original systems still in use)



# Posada de Colores: Envelope

Façade weatherization



Window upgrades

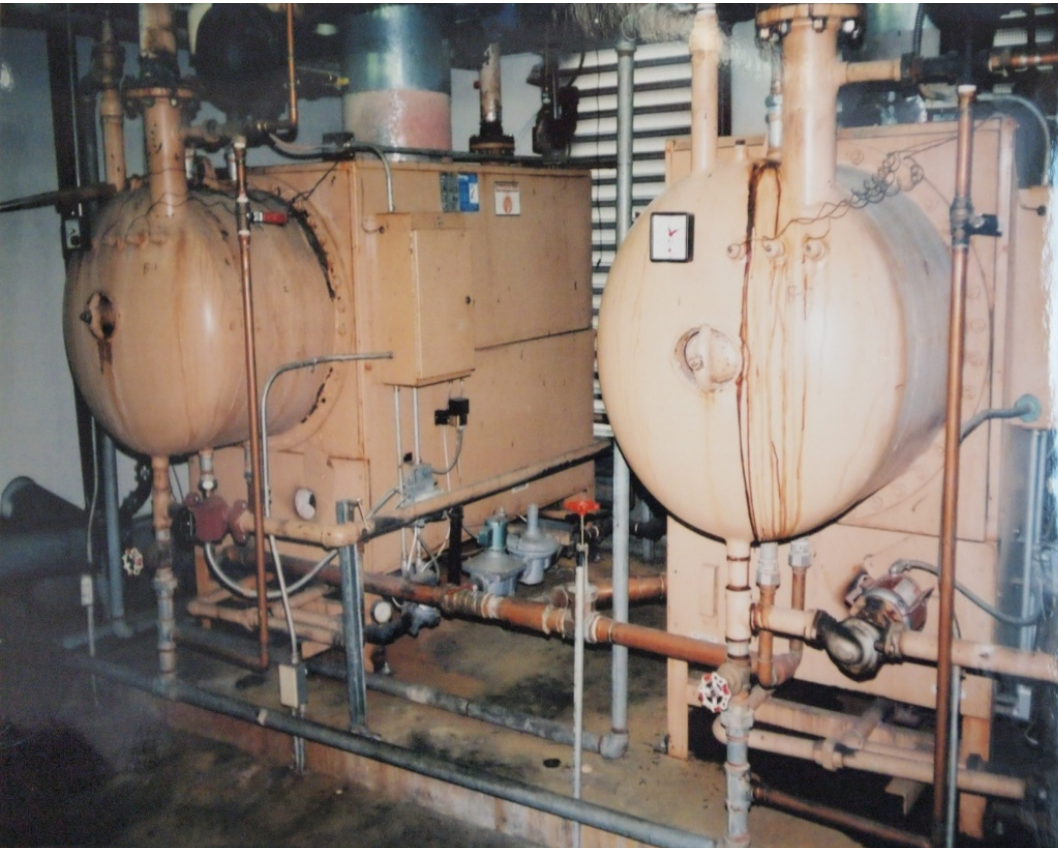




# Posada de Colores: Heating Equipment

Before

After



# Posada de Colores: Other Green Measures



- Energy: Lighting in units & common areas
- Community: ADA compliance remodel of common area restrooms
- Water: Common area water efficiency; efficient laundry machines



# Statewide Multifamily Resources

Program Design Recommendations

Workforce Development

Marketing Materials

Web Portal & IT Tools

# HERCC Multifamily Subcommittee

- CA Home Energy Retrofit Coordinating Committee convened by EPA Region IX
- MF Sub-Committee (MF HERCC; chaired by StopWaste.Org)
  - Local, State, Federal Government
  - Utilities
  - Consultants & Industry professionals
- Task Groups:
  - Audit Protocols
  - IT Data Protocols
  - HERS II MF tools
  - Weatherization & low-income coordination



# MF HERCC Recommendations

- Add whole building performance-based program to existing individual measure-based program
- Minimum feasible energy improvement levels:
  - 10 % for 2000 – 2008
  - 15 % for 1980 – 2000
  - 20% for pre-1980
- Rater/energy consultant delivery
- Single point of customer interface
- Streamline low-income program delivery
- Audit protocols; combustion safety protocols

# MF HERCC Recommendations

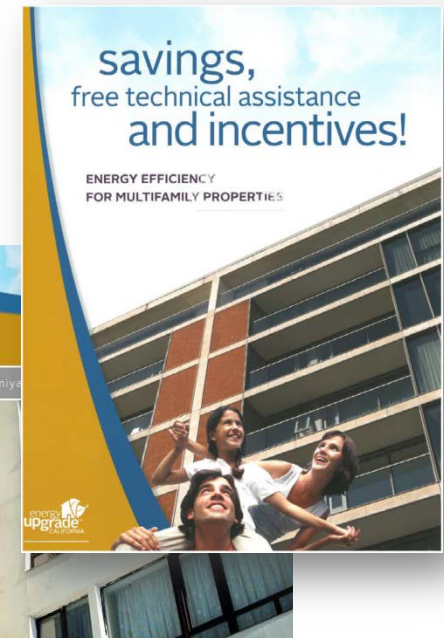
- Additional recommendations on:
  - Workforce training & certifications
  - Energy Analysis Software
  - Performance measurement, tracking & benchmarking
- Market characterization
  - Diversity of building types, energy systems, billing configuration, ownership structures
  - Trigger events & opportunities

# Workforce Development

- Rater/Auditor
  - California Multifamily Existing Building training
  - BPI MFBA, GreenPoint Rated
- Energy Analyst
  - HERS II software training
- Building Operators
  - BPI MF Energy Efficiency Building Operator
  - Supports NAHMA, Green Business Program
- Central System Contractors (to be delivered)

# Marketing Materials

- Developed Under State Energy Program:
  - Web Portal Design
  - Templates
  - Tri-fold & Multi-page Brochures
  - Case Studies
  - Banners
  - Photo Library



## Energy Upgrades Improve Your Bottom Line

Save money on operating costs, reduce energy use, and improve the quality of your properties with the Energy Upgrade California Multifamily Program. Get the technical assistance you need to make smart energy-efficient improvements—and find rebates, incentives and financing to help pay for them!

The Energy Upgrade Program is currently available in five counties:

- Alameda
- Los Angeles

# Integrated Tools for Multifamily Portfolios

- Energy Upgrade CA Multifamily web-portal: [Multifamily.EnergyUpgradeCA.org](http://Multifamily.EnergyUpgradeCA.org)
- Energy Upgrade CA Funding Finder
  - Guidance on upgrade approach & measures
  - Connect to applicable rebates & incentives
- Compass Portfolio Tracker
  - Utility usage analysis
  - Track upgrades & program participation



# Recommended Retrofit Approach: Whole Building

## Opportunities for improvement

Export

Analyze Energy Use &  
Track Upgrades

### 7 Recommended Measures

- Replace dwelling unit lighting with high efficacy fixtures
- Add dwelling unit lighting controls
- Replace common areas lighting with high efficacy fixtures
- Add lighting controls to common area fixtures
- Replace outdoor lighting with high efficacy fixtures
- Add lighting controls to outdoor fixtures
- Replace refrigerators with ENERGY STAR appliances



13 incentives available for your property\* [Printable View](#)

Show  entries

Search:

Incentive Name

Expiration Date

Appliance Recycling Program

more▼

California Utility Allowance Calculator

more▼

Commercial Deemed Incentives

more▼

Energy Savings Assistance Program (ESAP)

more▼

Energy Upgrade CA in San Diego (City of San Diego)

more▼

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Energy Upgrade CA in San Diego County / SDG&amp;E Multifamily Program

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Green Affordable Housing Preservation Loan Fund

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Green Loan Fund

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Green Refinance Plus

more▼

Low Income Housing Tax Credits

more▼

# Baseline Utility Analysis

## Compass Portfolio Tracker

### Energy Savings Report

#### Demo Building

123 Main St  
Philadelphia, PA 19010

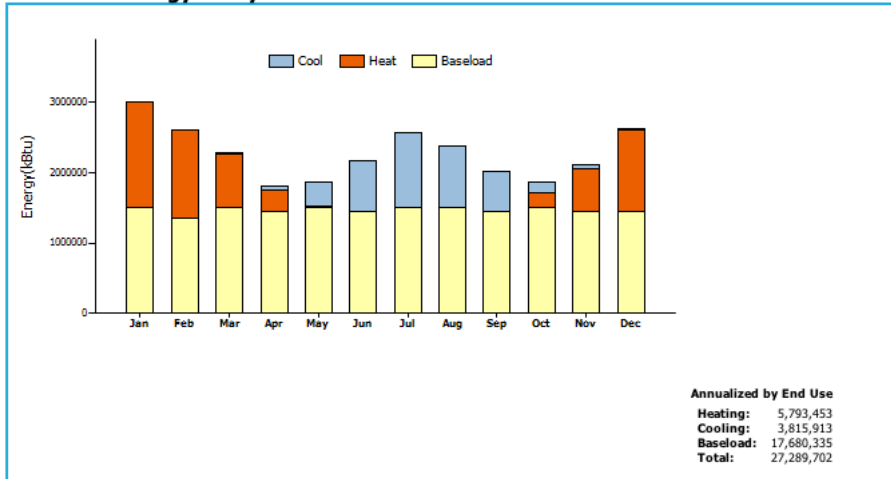
**Owner:** Rich  
**Year Built:** 1973  
**Square Footage:** 300,000 sf  
**Report Date:** 5/3/2010

#### Scenario details

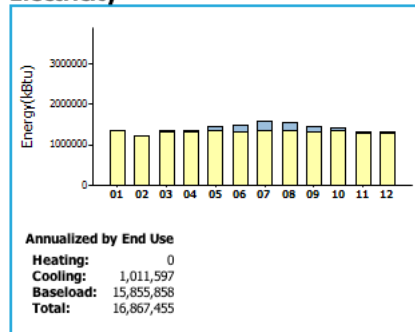
**Baseline Period:**  
Jun 2008 - Jun 2009

**Weather:** Normalized

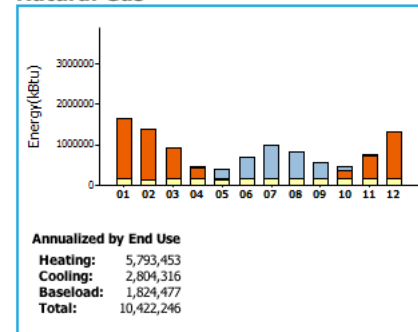
#### Total Site Energy Analysis



#### Electricity



#### Natural Gas



# Integrated Tools for Multifamily Portfolios

## Navigate

- Programs/Rebates
- Approach/Measures
- Resources
- Professionals

## Benchmark

- EPA Portfolio Manager
- Energy use intensity
- Weather normalized


## Track Upgrades & Programs

- Utility
- Local Government
- GreenPoint Rated

## Quantify

- Pre vs. Post Savings
- Projected vs. Actual Savings





The upgrade not only reduced our natural gas bills; it has benefited our residents with improved thermal and acoustical comfort.

— *Ross Ojeda*

*Director Real Estate, Unity Council*

# Contact Information

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