



Financing Programs for Green and Energy Efficient Rehabs

Housing California Annual Conference 2010

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Encinitas, CA
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Agenda

Energy Efficiency Financing

- Introduction
 - Financing Options:
 - SAFE-BIDCO, Electric and Gas Industry Association
 - Electric and Gas Industry Association
 - Green Rehab Loan Pilot – Enterprise Community Partners
 - LISC - Financing Green Improvements to Public Housing: Retrofits - LISC
 - Property-Assessed Clean Energy (PACE) Programs - Renewable Funding
 - Leveraging utility, ARRA, and weatherization programs
 - Questions/Discussion
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Presenters

Introduction

Julieann Summerford, Associate Director

Heschong Mahone Group, Inc.

- Designs and implements multifamily energy efficiency programs including Designed for Comfort, California Multifamily New Homes Program, Home Performance programs, utility allowance reform
- BS Environmental Policy Analysis and Planning, UC Davis

Maryann Leshin, Director of Northern CA Programs

Enterprise Community Partners

- Manages affordable housing programs including green retrofit financing, foreclosure response, public housing revitalization and capacity building.
 - BA in American Studies, Brandeis University, MA in Community Planning, Antioch University West
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Presenters

Introduction

Peggy Jen, Senior Program Officer, Housing, Bay Area LISC

- Develops and implements LISC work in comprehensive revitalization plans including assembling financial resources, underwriting and monitoring loans and grants as well as LISC's Housing Development Training Institute
- BA Economics and Political Science, UC Berkely and graduated from Rutgers University

Annie Henderson, CaliforniaFIRST Program Director, Renewable Funding LLC

- Oversees the management of program design, development and implementation, as well as facilitation of legal and finance components of the statewide municipal financing program offered by California Communities
 - B.S. Environmental Studies and Geology, University of Pennsylvania
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Multi-Family Initiatives Underway

Programs, Technical Tools and Capacity, Financing

- Programs under development
 - Whole-building
 - Deep energy savings
 - Utility - focus on single-family - multi-family “Phase II”
- Technical tools, capacity and assistance
 - Navigational tool
 - Tracking and benchmarking energy use
 - Building analysis and measurement
- Policy initiatives
 - Collaborative effort to influence CPUC, CEC, State
 - Equitably serve low-income families in both single- and multi-family homes
 - Bring focus to multi-family sooner than planned by CPUC, CEC
- Financing
 - Existing and developing options - today’s agenda

Electric and Gas Industry Association

Energy Efficiency Loan

EGIA/Renewable Energy Equipment Leasing partnership

- Commercial energy efficient and renewable equipment financing-lease solutions
- Flexible programs tailored to specific needs and qualifications of each project
- Loan amounts from \$10,000 - \$5,000,000
- Terms from 1 to 5 Years
(up to 10 years depending on size of transaction and credit rating)
- Types of leases available: (HVAC, solar, wind, geothermal, wind, lighting, etc)
 - Finance lease (conditional sales contract)
 - Tax lease
 - Municipal, local, county, state & federal
- One page credit applications up to \$100,000

Eric Alan Howarth

Cell: 209-423-6795

Visit: www.egia.org/commercial



SAFE-BIDCO

Energy Efficiency Loan

- Small businesses, some landlords, and non-profits
- Requires energy analysis
 - Audit, analysis, recommended upgrades, estimated cost and energy savings
 - < \$200K, involves utility endorsed or rebated measures, utility certification meets requirement
 - If combined, loans can be used for up to 100% of net (minus rebates, etc) project expenses for:
 - Energy studies and design and consultant fees
 - Materials/equipment costs incurred after acknowledged receipt of a application
 - Loan fee
 - Improves energy efficiency by a minimum of 15%
 - Existing facilities or new facility upgrades
 - Cannot be used for operations, maintenance, routine repairs, or fuel costs



Briefing on Enterprise SF Bay Area *Green* *Retrofit Pilot Program*



Leading with Ideas

DEMONSTRATING THROUGH ACTION

Transforming with Capital

SUSTAINING THROUGH POLICIES AND PARTNERSHIP

What is the Enterprise Green Retrofit Pilot Program?

- An innovative effort to improve energy and water efficiency in older affordable **multifamily** buildings by combining technical support, energy funding, utility rebate and incentive resources and debt to accomplish green retrofit projects.
- Five non-profit affordable housing developers are participating in the pilot: RCD, EBALDC, TNDC, CHP and Satellite Housing.
- Fifteen properties will run through the pilot; the majority are master metered.
- All of the properties are located in cities of San Francisco, Berkeley and Oakland.



Goals of the Pilot

To create a **replicable** and **scalable** approach to funding energy efficiency and water conservation upgrades in affordable multifamily housing, while....

- Improving property cash flow
- Improving health of buildings and residents
- Linking to green jobs programs

And....enable retrofits to occur more quickly than a full rehab

Pilot Components

- Each participant received a \$25,000 grant
- Each property received a Green Capital Needs Assessment
- Technical support offered to each participant
- Financing through Enterprise loan programs



Green Retrofit Funding Package

- Pilot data indicates that energy savings will be sufficient to service a loan in an amount that will cover approximately 25% - 50% of the cost of the energy and water efficiency improvements
- The balance of the cost will be covered by subsidies, PG&E rebates and/or replacement reserves. Subsidies include:
 - ✓ Weatherization Assistance Program funds
 - ✓ Energy Efficiency & Conservation Block Grant funds
 - ✓ Local affordable housing funding, other local funds

Green Retrofit Loans

- **PROPOSED LOAN TERMS:**

✓ Target Interest Rate	5%
✓ Loan Term	10 years
✓ Debt Coverage Ratio	1.15 – 1.25
✓ Collateral	unsecured
✓ Repayment Source	amortized monthly payments

- Loans repaid with savings achieved as a result of the energy and water efficiency improvements.

EXAMPLE OF PROJECTED ENERGY SAVINGS AND DEBT SERVICE CALCULATIONS*

EXAMPLE #1: San Francisco SRO; 105 units

COST OF IMPROVEMENTS:	\$692,010 (\$6,591/unit)
ENERGY SAVINGS:	\$22,243/year
DEBT LOAD:	\$151,964

Projected Energy Savings Over Current Use: 25%

*based on draft Green Capital Needs Assessment

POTENTIAL FINANCING SCENARIO – San Francisco

DEBT	\$ 151,964
Weatherization (assumes \$2.5k/unit)	\$ 262,500
Replacement Reserves (assumes \$500/unit)	\$ 52,500
Utility Rebates/Incentives (assumes 10% of total cost)	\$ 67,546
CDBG (SF assumption only)	<u>\$ 157,500</u>
	\$ 692,010

EXAMPLE #1 PROJECT BUDGET SCENARIO

Boiler/Motors	32,535
Windows/Doors	126,175
Roof Insulation	10,472
Thermostats	35,700
DHW	14,520
Solar DHW	204,750
HVAC VFDs	15,862
Lighting	4,580
Refrigerator	54,600
Toilets	42,350
Roof Replacement	73,920
Contingency	30,773
OHP	30,773
Engineer/Constr Mgmt	15,000
TOTAL	692,010



EXAMPLE OF PROJECTED ENERGY SAVINGS AND DEBT SERVICE CALCULATIONS*

EXAMPLE #2: Berkeley SRO; 74 units

COST OF IMPROVEMENTS:	\$346,645 (\$4,684/unit)
ENERGY SAVINGS:	\$13,241/year
DEBT LOAD:	\$90,462

Projected Energy Savings Over Current Use: 25%

*based on draft Green Capital Needs Assessment

Example #2 PROJECT BUDGET SCENARIO

Boiler/Motors	35,130
Windows/Doors	86,100
Roof Insulation	6,928
Thermostats	22,200
DHW	14,875
HVAC VFDs	18,125
Lighting	5,530
Refrigerator	19,050
Toilets/showerheads	17,689
Roof Replacement	80,414
Contingency	15,302
OHP	15,302
Engineer/Constr Mgmt	10,000
TOTAL	346,645



POTENTIAL FINANCING SCENARIO – Berkeley

DEBT	\$ 90,462
Weatherization (assumes \$2.5k/unit)	\$ 185,000
Replacement Reserves (assumes \$500/unit)	\$ 37,000
Utility Rebates/Incentives (assumes 10% of total cost)	<u>\$ 34,184</u>
	\$ 346,646

SAMPLE OF PROPOSED IMPROVEMENTS & ANNUAL ENERGY SAVINGS PROJECTED*

<u>Cap. improvement</u>	<u>Energy cost savings per year</u>
Boilers	\$ 2,526
Windows	\$ 1,945
Roof Insulation	\$ 109 (may require new roof)
Thermostats	\$ 2,160
Domestic Hot Water	\$11,126
Air Handling Units	\$ 894
Lighting	\$ 1,635
Toilets	\$ 331

*SF Example (58 units)



MONITORING TO CONFIRM ACTUAL PERFORMANCE

- A key component of this effort is to monitor energy use post-retrofit and compare to pre-retrofit use.
- Every pilot project has a Portfolio Manager account.
- The owners are enrolled in the Automated Benchmarking Service provided by PG&E for owner paid utilities which uploads electric and gas use data into Portfolio Manager.
- The account will reflect at least 12 months of historical utility data on electric, gas and water usage.

Additional issues we are working on....

- How do the “externalities” of tenant behavior, weather, utility pricing impact this work?
- How to deal with individually metered buildings? Will owners want to explore changes to utility allowances to enable financing?
- Can we find ample sources of subsidy for the project to match the loan?

WHAT'S NEXT?? \$3m State Energy Program Award

- The City of SF Mayor's Office of Housing, in partnership with Enterprise and LIIF, was awarded \$3million in State Energy Program (SEP) funds to continue the work of the Enterprise pilot.
- These funds will cover:
 - Loan capital
 - Energy Audits
 - Technical support
 - A portion of project soft costs



WHAT'S NEXT?? \$3m State Energy Program Award

The SEP Green Retrofit program will...

- Focus on the cities of SF, Oakland and Berkeley
- Seek to combine Weatherization funds with SEP loan funds
- Target properties with the potential for at least a 25% reduction in energy use
- Owners apply to the program

FOR MORE INFORMATION:

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Leveraging Funding and Programs

- State Energy Programs (SEP) Funding
- Utility Rebates
- Solar Incentives
- Low Income Energy Efficiency (LIEE) Program
- Weatherization Assistance Program (WAP)
Local affordable housing funds

State Energy Programs (SEP) Awardees for Multifamily Programs

Program	Region	Funding	Type
CaliforniaFIRST	Statewide	16.5	Municipal Financing
N Coast Energy Independence	North Coast	4.4	Municipal Financing
SF Sustainable Financing	San Francisco	2	Municipal Financing
Sonoma County Energy Independence	Sonoma	2.5	Residential Retrofit
Home Performance	Sacramento Region	20	Residential Retrofit
Retrofit Bay Area	Assoc. of Bay Area Governments	10.8	Residential Retrofit
Moderate Income Sustainable Tech.	Rural Counties	16.5	Residential Retrofit
Affordable Multi-Family Retrofit	Bay Area	2.9	Residential Retrofit

Source: CEC, Jan. 2010. www.energy.ca.gov/recovery/awards/index.html

Leveraging Programs

Utility, Local and Regional Stimulus, and Weatherization Programs

Utility Multi-family Energy Efficiency Rebate Programs

PG&E

Appliances

Boilers and water heating

HVAC

Lighting

The Gas Company

Boilers and water heating

Furnaces

Insulation

Dishwashers

Southern California Edison (SCE)

Lighting

HVAC

Insulation

Window

SDG&E

Multi-Family Rebates and Services - Opening soon

See utility Web site: search for multifamily rebates

Know requirements before you purchase and install



Leveraging Programs

Utility, Local and Regional Stimulus, and Weatherization Programs

The Low-Income Energy Efficiency Program (LIEE)

- No-cost weatherization services to low-income households who meet the CARE income guidelines

Refrigerators
 Weatherstripping
 Water heater blankets
 Low-flow showerheads
 Furnaces
 Caulking
 Door and building envelope repairs

Phone Numbers or Energy Assistance Programs

Utility	Phone Numbers
PG&E	800-933-9677
Edison	866-675-6623
SDG&E	800-411-7343
SoCalGas	800-427-2200
Alpine Nat'l Gas	209-772-3006
Avista Utilities	800-227-9187
Bear Valley Elect	800-808-8237
PacifiCorp	888-221-7070
Sierra Pacific	800-782-2498
Southwest Gas	877-860-6020
West Coast Gas	916-364-4100



<http://www.cpuc.ca.gov/PUC/energy/Low+Income/liee.htm>

Multifamily Affordable Solar Housing (MASH)

Utility, Local and Regional Stimulus, and Weatherization Programs

- **PG&E, SCE, and The California Center for Sustainable Energy**
 - Pacific Gas & Electric - Solar Hotline 415-973-3480
 - Track 1 fully subscribed
 - California Center for Sustainable Energy 858-244-1177
 - Track 1 fully subscribed
 - Southern California Edison - Contact 866-584-7436
- **Track 1: Offset common area and tenant loads**
 - Common area load: \$3.00/watt
 - Tenant load: \$4.00/watt
- **Track 2: All accepting applications for incentives**
 - Direct tenant benefits - savings shared with tenants)
 - Competitive process

<http://www.cpuc.ca.gov/PUC/energy/Solar/mash.htm>

Influencing Programs

Utility, Local and Regional Stimulus, and Weatherization Programs

- 90,000 HUD-assisted multifamily apartments in California eligible for \$185 million in Weatherization Assistance Program (WAP) Funds
 - California Housing Partnership urges California Community Services Department to Serve Low Income Rental Apartments
 - March 2010, DOE ruled HUD-assisted multifamily and public housing properties that meet income requirements are eligible for up to \$6,500/unit in WAP funds
 - Does not require CSD to make funds available
- Encourage CSD to equitably offer funds for more low-income multi-family upgrades

<http://www.chpc.net/preservation/WAP.html>