

MULTIFAMILY GREEN RETROFIT TOOLKIT



Los Angeles Multifamily Hub

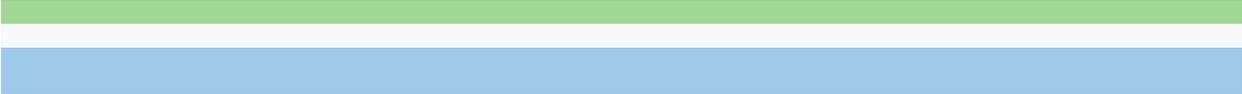


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There are many types of residential green retrofit tools to help lower energy costs, including foam insulation. Source: Flickr.

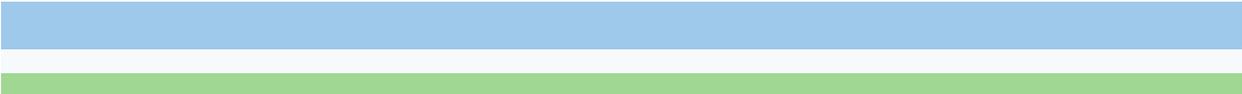


KELLY'S LETTER

United States Department of Housing & Urban Development

The United States Department of Housing and Urban Development, also known as HUD, is a Cabinet department in the Executive branch of the United States federal government. It is currently administered by HUD Secretary, Shaun Donovan, and his staff. HUD is responsible for a variety of programs, including a number of grant and loan programs.

Contact Information



1 WHY GO GREEN?



Green retrofits allow multifamily property owners to improve energy efficiency in a way that is tailored to the building's specific needs!

WHAT IS GREEN RETROFITTING?

Green retrofits are any changes, such as double pane windows, insulation or alternative energy generation, that make a building or home more energy efficient. Green retrofits **reduce** a property's energy and water usage, **lower** operational and maintenance costs, **improve** the residents' quality of life, and **reduce** a building's impact on the environment.

DID YOU KNOW?

Middle class families pay roughly **3.5%** of their household income on utility costs. Low-income families spend approximately **20% on utility costs**- and the costs are rising!

The residential sector is responsible for **20% nation's green house gas emissions**. Making multifamily buildings more energy efficient is an important way to fight global warming!

1 WHY GO GREEN?

BENEFITS

Make Economic Sense!

- Green retrofits reduce water and energy costs.
- Green retrofits add marketability and profit value to your property
- Green retrofits generate economic activity. According to the Department of Energy, weatherization creates 52 direct and 23 indirect jobs for every \$1 million invested!

Help Preserve and Protect the Environment!

- Green Retrofits reduce emissions and help to conserve our finite environmental resources.

Improve Quality of Life of Low-Income Residents!

- Green Retrofits improve the quality of life for tenants by providing healthier living environments.
- Green Retrofits preserve and expand the affordable housing stock.

RETROFITTING TOOLS

- **Energy efficient products** and appliances, such as heating and cooling systems, water heaters, washers and dryers, and lighting.
- **Building envelope improvements** such as windows, doors, and insulation.
- **Heating, Ventilation & Air Conditioning (HVAC)** improvements.
- **Indoor air quality improvements**, including exhaust fans and the use of low or no-VOC paints.
- **Landscaping**, including gray water irrigation and drought resistant gardens.
- **Solar Photovoltaic (PV) Systems and Wind Turbines** are gaining traction in both residential and commercial applications.
- **Educating your residents** on how to conserve energy and resources ensures the full benefit of your green investments.

2 HUD'S GREEN MISSION



The amount of information regarding green building can be overwhelming. HUD's Los Angeles Multifamily Hub toolkit will clearly lay out the different resources available for multifamily buildings and make going green as straightforward as possible!

HUD'S 2010-2015 STRATEGIC PLAN GOALS

- 1** **Strengthen** the nation's housing market to bolster the economy and protect consumers.
- 2** **Meet the need** for quality affordable rental homes.
- 3** **Utilize** housing as platform for improving quality of life.
- 4** **Build** inclusive and sustainable communities free from discrimination.
- 5** **Transform** the way HUD does business.

2 HUD'S GREEN MISSION

HUD SUSTAINABILITY GOALS

Increasing energy efficiency, reducing greenhouse gas emissions, and reducing dependency on foreign oil are priorities of the Obama Administration.

Goal 4.B in HUD's Strategic Five-Year Plan is to "promote energy-efficient buildings and location-efficient communities that are healthy, affordable, and diverse."

The Los Angeles Multifamily office is committed to:

- Supporting sustainable housing, transportation options, and communities,
- Improving residents' health by promoting green and healthy design, construction and maintenance of housing and communities
- Supporting an energy efficient, green, and healthy housing market

Green Retrofitting is one of HUD's High Priority Performance Goals for Fiscal Year 2011

HUD'S HIGH PRIORITY PERFORMANCE GOAL #4: ENERGY AND GREEN RETROFITS

The HUD Los Angeles Field Office is **committed to promoting sustainable development** as outlined in HUD's Strategic Five Year Plan. Towards this end, we will prioritize projects that incorporate green design elements into their planning, construction and maintenance. While there are myriad of options to chose from, this toolkit will introduce you to CalGreen Tier One and Tier Two criteria, Enterprise Green Communities, LEED, Energy Star, and GreenPoint Rated.

3 RETROFIT RESOURCES



There are many different government and non-government financial incentives available to pursue green retrofits. They can be in the form of tax incentives, loans, rebates, trade-ins, free products and services. The following section outlines the major incentive programs in the Southern California region for multifamily building property owners and managers.

THREE STEPS TO RETROFITTING

1

ASSESS

your needs,
finances, and
incentives.

2

RETROFIT

your property.

3

SAVE

money and the
environment.

3 RETROFIT RESOURCES

LIST OF RETROFIT RESOURCES

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3 RETROFIT RESOURCES

RESERVE FOR REPLACEMENTS AND RESIDUAL RECEIPTS

DESCRIPTION

The HUD Los Angeles field office supports the Secretary's mission to green the portfolio of affordable housing. Multifamily property owners can now use their **Reserve for Replacements and Residual Receipts** for green retrofits. As an additional incentive, any properties that choose to install renewable energy can carry over all energy savings and use the money for further improvements to their property or to provide qualified resident services.

Take advantage of this opportunity by reviewing the financing tools and resources available for greening your property in this Get-Green Toolkit!

RESERVE FOR REPLACEMENTS: ELIGIBLE ITEMS

An Energy Audit will help you determine what retrofits are right for *your* property. Some retrofits considered as eligible for draws from this Fund are listed on the right and on the following page:

1. Replacement of major appliances in dwelling units with *Energy Star certified Appliances*.
2. Replacement of kitchen and bathroom sinks and counter tops, bathroom tubs, water closets, and doors with *green materials, such as reclaimed wood, bamboo or cork*.
3. Installation of a *green roof*.
3. Installation of *solar panels*.
5. Installation of a system for *harvesting rainwater*.
6. Installation of *low-flow faucets and shower heads*.
7. Installation of a *dual-flush system*.
8. Replacing light fixtures with *energy-saving compact fluorescent bulbs*.
9. Replacing central air conditioning and heating systems, with *more efficient models*.

3 RETROFIT RESOURCES

RESERVE FOR REPLACEMENTS AND RESIDUAL RECEIPTS

10. *Installation of an air conditioning system with **non-HCFC refrigerants**.*
11. *Major repaving/resurfacing/seal coating with **permeable surfaces** to cut down on run-off.*
12. *Repainting of the entire building exterior with **recycled and low-voc paints**.*
13. *Re-landscaping your property with **drought resistant plants**.*
14. *Replacement of exterior (lawn) sprinkler systems with a **gray water recycling system**.*



Another item eligible for reserve for replacement funding are rain barrels, which can help to harvest and recycle rainwater. Source: Flickr.



The USDA is preparing a green roof, an item eligible for reserve for replacement funding. Source: Flickr.

15. *Installation of **geothermal heating system** for your pool.*
16. ***Recycling** as much of your construction waste as possible.*

3 RETROFIT RESOURCES

RESERVE FOR REPLACEMENTS AND RESIDUAL RECEIPTS

RESERVE FOR REPLACEMENTS: INELIGIBLE ITEMS

Items traditionally considered as ineligible for draws from this Fund include maintenance items such as (but not limited to):

1. *Repainting of interior areas of projects. Note: A separate interior painting reserve for this kind of work may be established by mutual agreement and consent of the concerned parties.*
2. *Replacement of range burners, bobs, oven elements, controls, valves, wiring, etc.*
3. *Replacement of dwelling unit air conditioning components such as fan motors and window unit compressors.*
4. *Minor repairs to central air conditioning and heating systems such as valve replacements and the cleaning of boiler interiors.*
5. *Minor roof repairs, including minor repairs to gutters and down spouts.*
6. *Minor paving repairs.*
7. *Caulking and sealing.*
8. *Window and screen repairs.*
9. *Purchase of maintenance tools and equipment such as lawn mowers or snow blowers.*
10. *Purchase of minor office equipment.*

RESIDUAL RECEIPTS

In addition to eligible uses of residual receipts as outlined in HUD Handbook 4350.1, subject to HUD approval by the local Multifamily Hub Director, residual receipts can be used for energy-efficient and/or renewable energy improvements.

3 RETROFIT RESOURCES

ENERGY STAR MULTIFAMILY PROGRAMS

DESCRIPTION

ENERGY STAR is government program that helps businesses and individuals become more environmentally friendly through energy efficiency.

Joining ENERGY STAR through a partnership commitment is free and includes an agreement to:

- Measure, track, and benchmark energy performance
- Develop and implement a plan to improve energy performance, adopting the ENERGY STAR strategy
- Educate your staff and the public about your partnership and achievements with ENERGY STAR

To purchase ENERGY STAR qualified products in bulk, owners can utilize the [Quantity Quotes website](#). The ENERGY STAR Awards are available to those who have made outstanding contributions to protecting the environment. Other free resources include the “[Portfolio Manager](#),” which evaluates the best practices for your building, and online training sessions.



WHO CAN APPLY

Any multifamily building owner.

HOW TO APPLY

To be an ENERGY STAR partner, fill out the “ENERGY STAR Partnership Agreement” form.

All resources, including the guidelines and online training sessions, are available on the ENERGY STAR website at energystar.gov.

MORE INFORMATION

For further information on Energy Star and its Multifamily Programs, please [visit their website](#).

3 RETROFIT RESOURCES

LOW-INCOME HOUSING ENERGY ASSISTANCE PROGRAM

DESCRIPTION

LIHEAP assists low income households in meeting their immediate home energy needs. There are three types of assistance.

- **Home Energy Assistance Program (HEAP)** provides direct payment towards a utility bill. Average assistance in 2008 was \$269, and served 103,420 households.
- **Weatherization** provides free energy efficiency upgrades to low-income families. California leverages this with additional funds from the US Department of Energy's Weatherization Assistance Program (WAP). More on weatherization for buildings can be found on the next page under WAP.
- **Energy Crisis Intervention Program (ECIP)** assists low-income households that are in a crisis situation, such as those who receive a disconnect notice of service termination. 55,672 households received an average \$509 in 2008.

WHO CAN APPLY

Any California resident whose income does not exceed 75% of the State Median Income. At the time of publication, this included:

Household Size	Annual Income	Monthly Income
1	\$29,791.61	\$2,482.61
2	\$38,957.88	\$3,246.49
3	\$48,124.44	\$4,010.37
4	\$57,291.00	\$4,774.25
5	\$66,457.56	\$5,538.13

HOW TO APPLY

Contact your local energy service provider or call the CA Department of Community and Development Services at 1-866-675-6623.

MORE INFORMATION

For more information, please refer to the California Department of Community Services & Development's [Energy Assistance Program](#) or the U.S. Department of Health & Human Services' [LI-HEAP program](#).

3 RETROFIT RESOURCES

WEATHERIZATION ASSISTANCE PROGRAM

DESCRIPTION

WAP's purpose is to increase the energy efficiency of dwellings owned and occupied by low-income Californians, reduce total energy expenditure, and improve health and safety. It has a maximum average investment of \$6500 per unit.

Leveraging this with the LIHEAP program is encouraged to maximize resources.

WHO CAN APPLY

For multifamily properties with 5 or more units, at least 66% of the units must contain income-qualified households, which is 75% of the State Median Income (table provided in LIHEAP section). There can be no undue or excessive enhancement that occurs to the value of the dwelling units, and owners must extend protection against rent increases as it relates to weatherization improvements for at least 2 years.

The US Department of Energy provides a streamlined qualification process for certain HUD and USDA multifamily buildings for weatherization. This list can be found the [DOE website](#) and more guidance can be found at the and more guidance can be found at the [WAP Technical Assistance Center website](#).

HOW TO APPLY

Contact your local energy service provider or call the CA Department of Community and Development Services at 1866-675-6623.

MORE INFORMATION

For further information and help on the Weatherization Assistance Program, visit:

- [Community Services & Development Website](#)
- [United States Department of Energy Website](#)
- [WAP Technical Assistance Center](#)
- [WAP Application](#)
- [Department of Energy WAP webpage](#)
- [California WAP webpage](#)

3 RETROFIT RESOURCES

WORK QUALITY SPECIFICATIONS | ENERGY AUDIT TOOL

DESCRIPTION

In the first half of 2011 the Department of Energy will be convening industry technical experts to develop **Standard Work Specifications** for multifamily building energy efficiency upgrades. Standard Work Specifications define the minimum requirements for high quality work and the conditions necessary to achieve the desired outcomes for each energy efficiency retrofit measure.

Simultaneously, the Department of Energy is developing a new Multifamily Energy Audit Tool to help the Weatherization Assistance Program and other multifamily retrofit efforts to accurately analyze complex building systems and identify the areas with the most energy savings potential.



PROJECT GOALS

The Standard Work Specifications are designed to foster the growth of a high-quality energy retrofit industry and a skilled workforce. They can be adopted by retrofit programs nation-wide seeking to increase the consistency and effectiveness of the work performed, and utilized by training providers to improve course curriculum and training materials.

Both the Standard Work Specifications and the Multifamily Energy Audit Tool will improve the consistency and effectiveness of retrofit work that is performed under the DOE Weatherization Assistance Program and state, municipal, and utility retrofit programs nationwide.

MORE INFORMATION

For further information, visit the Department of Energy's website on [Residential Retrofit Guidelines](#).

3 RETROFIT RESOURCES

ENTERPRISE GREEN COMMUNITIES PROGRAM



DESCRIPTION

Enterprise Green Communities provides financial assistance in the forms of grants, loans and housing tax credits, and expertise to enable affordable housing developers to build and rehabilitate homes that are healthier, more energy efficient and better for the environment, without compromising affordability.

- Charrettes Grants of \$5000 per project
- Sustainability Training Grants of \$5000 per project
- Predevelopment Fund Loans
- Acquisition Loans
- Low Income Housing Tax Credit (LIHTC) Equity
- Mini Green Loans up to \$50,000

WHO CAN APPLY

Eligibility is determined for each project based on a variety of factors, including:

- Project completion status at the time of the application.
- Occupancy status of projects prior to grant award.
- Housing affordability of the project and how it compares to the Average Median Index.
- Number of units in the project.
- An organization's status as a 501 (c)(3).

HOW TO APPLY

For information on how to apply to one of Enterprise Green Communities' grants, loans, or tax credit, visit their [website](#).

MORE INFORMATION

For further information on Enterprise or any of its programs, visit their [website](#).

[Enterprise's Green Development Plan template](#) is also available for download.

3 RETROFIT RESOURCES

ENTERPRISE GREEN MULTIFAMILY RETROFIT PROGRAM

DESCRIPTION

Enterprise has launched the Enterprise Green Multifamily Retrofit Program to offer a holistic protocol for engaging in comprehensive retrofits while coordinating, packaging and delivering targeted capital resources that leverage larger flows of public, private and philanthropic capital. They combine technical support that offers:

- **Whole-Building Analysis.** Building analysis that follows the Enterprise Green Retrofit Audit Protocols.
- **Energy and Water Usage Data Collection .** Benchmarking utility performance.
- **Financing.** Helping to determine whether a property is eligible for refinancing or an add-on loan to cover costs of the improvements.
- **Assistance with Assembling Subsidy Sources.** Examples of assistance include weatherization funds and utility-based rebates and incentives.
- **Verification & Monitoring.** Tracking utility consumption data over time.



Trolley Square, an Enterprise Green Communities Project. *Source: Enterprise*

- **Training and Education.** Assistance in training and educating staff and residents on property maintenance.

MORE INFORMATION

For more information download a summary report of the [Enterprise Green Multifamily Retrofit Program](#).

Learn about [Enterprise's Green Retrofit Audit Protocols](#).

3 RETROFIT RESOURCES

HOME DEPOT FOUNDATION COMMUNITY TREES GRANT



DESCRIPTION

The Home Depot Foundation makes grants to 501(c)(3) tax-exempt public charities in the United States and to charitable organizations in Canada. The Foundation administers a grant supporting green space and sustainable development through its Community Trees Grant Program, which was combined with its Affordable Housing Built Responsibly Program. The Community Trees Grant Program supports planting of trees and the development of green space.

WHO CAN APPLY

Eligibility and preference are given to 501(c)(3) tax-exempt public charities, proposals that include community engagement, green building design practices, affordable housing production.

HOW TO APPLY

Only one proposal from the same organization will be considered per calendar year. The Home Depot Foundation is currently undergoing a 2011 strategic planning process and their grant cycles are temporarily on hold. Visit their [website](#) for updates regarding the 2011 grant cycle schedule.

MORE INFORMATION

For further information on the Home Depot Foundation or its Community Trees Grant Program, [visit their website](#).

3 RETROFIT RESOURCES

MULTIFAMILY AFFORDABLE SOLAR HOUSING PROGRAM

DESCRIPTION

Part of the California Solar Initiative (CSI), the Multifamily Affordable Solar Housing (MASH) program offers incentives for installing eligible photovoltaic (PV) systems for qualifying multifamily affordable housing. It is designed to subsidize PV systems which will offset electricity loads and provide economic benefits for housing property owners, managers, and building tenants.

WHO CAN APPLY

To qualify for MASH incentives a property must meet the criteria:

- Have an occupancy permit for at least two years.
- Be located in PG&E, SCE or SDG&E service territory.
- Meet at least one of the definitions of “low-income residential housing”:
 1. A multifamily residential complex financed with low-income housing tax credits, tax-exempt mortgage revenue bonds, general obligation bonds, or local, state, or federal loans or grants
 2. A multifamily residential complex in which at least 20 percent of the total housing units are sold or rented to lower income households
 3. An individual residence sold at an affordable housing cost to a lower income household, subject to a resale restriction/equity sharing agreement

HOW TO APPLY

The MASH program offers two tracks. Track 1 provides fixed, up front, capacity based incentives. Track 2 is a competitive grant application process in which the applicant submits a proposed dollar per watt for a project. These applications are due the 1st and 3rd quarter of every calendar year.

MORE INFORMATION

- [*Center for Sustainable Energy website*](#)
- [*CSI Multifamily Affordable Solar Housing*](#)
- [*Go Solar, California!*](#)

3 RETROFIT RESOURCES

SOLAR LEASING AND PURCHASING MODELS

SOLAR LEASING

DESCRIPTION

Several private organizations have developed solar power purchasing agreements (PPA) through a leasing system that make it affordable to install one on your building. These programs include small monthly payments and may or may not include a small upfront fee.

MORE INFORMATION

Companies that provide leasing are:
SolarCity (www.solarcity.com)
Sungevity (www.sungevity.com)
SunRun (www.sunrunhome.com)

GROUP PURCHASING

DESCRIPTION

Group purchasing is offered by 1BOG (One Block Off the Grid), which holds city-based collective purchasing for solar panels. It negotiates discounts with solar companies depending on how many participants it can gather in a city during a campaign.

MORE INFORMATION

1BOG (www.1bog.com)



Solar skies panel to provide heat for the solar thermal system at the Wellstone Apartments in Minnesota. The power of the sun is an asset and resource that needs to be harnessed in California.

3 RETROFIT RESOURCES

LOW INCOME ENERGY EFFICIENCY PROGRAM

DESCRIPTION

The Energy Savings Assistance Program provides no-cost weatherization services to low-income households who meet the CARE (California Alternate Rates for Energy) income guidelines. Services provided include attic insulation, energy efficient refrigerators, energy efficient furnaces, weatherstripping, caulking, low-flow showerheads, water heater blankets, and door and building envelope repairs which reduce air infiltration.

WHO CAN APPLY

Tenants are eligible with approval of property owner or manager. In program year 2009 multifamily dwellings accounted for 27% of total low income energy efficiency program project work. Entire complexes can also be verified based on the 80-20 rule.

Low income property owners, and renters who meet the following guidelines are eligible (effective through May 31, 2011).

Household	Income
1 to 2	\$31,300
3	\$36,800
4	\$44,400
5	\$52,000
6	\$59,600
Each additional	\$7,600

HOW TO APPLY

Income must be verified by service provider and each participant must sign an application. Utility verified CARE recipients are automatically eligible but still require independent income verification.

MORE INFORMATION

Contact your local utility provider:

PG&E: 1-800-933-9677

SoCal Edison: 1-866-675-6623

SDG&E: 1-800-411-7343

SoCal Gas: 1-800-427-2200

[California Public Utilities Commission website](#)

3 RETROFIT RESOURCES

GREEN AFFORDABLE HOUSING PRESERVATION LOAN



*A home is the
foundation.*

DESCRIPTION

National Housing Trust Community Development Fund (NHTCDF) provides below market predevelopment and interim development loans to affordable housing developers who seek to incorporate green building techniques when rehabilitating existing affordable housing. Under the program, a portion of the loan will be forgiven when the developer demonstrates that they have incorporated practical, environmentally friendly design elements in the property's rehabilitation plan. NHTCDF will offer the early funding critical to starting the development process.

WHO CAN APPLY

Affordable housing developers who are interested in funding for predevelopment activities (in order to fund initial feasibility analysis, appraisals, market studies, environmental studies, due diligence and design studies, etc.) and interim development loans (in order to bridge the funding gap in acquisitions until more permanent sources of financing can be arranged).

HOW TO APPLY

Contact Keiva Dennis, Loan Officer, and John Morland, Loan Fund Administrator, for NHTCDF for more details.

202 333 8931 x26
kdennis@nhtinc.org

703 731 0608
jmorland@nhtinc.org

MORE INFORMATION

*For more information, visit the
[NHTCDF's website.](http://www.nhtcdf.org)*

3 RETROFIT RESOURCES

ADDITIONAL RESOURCES

ENERGY TIPS FROM DOE

DESCRIPTION

The DOE's *Energy Tips* is an interactive webpage that shows simple ways to increase energy efficiency. Although centered on single-family homes, the tips can be applied to multifamily homes. For more information, visit [DOE's website on energy tips](#).

WIPP PROJECTS FROM DOE

DESCRIPTION

The WIPP (Weatherization Innovation Pilots Program) grantees were given \$30 million to showcase 16 projects of innovative approaches to weatherizing low-income housing. These projects are good examples of ways to weatherize low-income housing. For more information, visit [DOE's website on WIPP](#).



DATABASE OF STATE INCENTIVES FOR RENEWABLES AND EFFICIENCY (DSIRE)

DESCRIPTION

The Database of State Incentives for Renewable Energy (DSIRE) is a comprehensive source of information on state, local, utility and federal initiatives on renewable energy and energy efficiency. It is an ongoing, frequently updated project of the US Department of Energy, the N.C. Solar Center and the Interstate Renewable Energy Council.

To search for incentives and renewable energy in your area, visit the DOE's [DSIRE website](#).

3 RETROFIT RESOURCES

ADDITIONAL RESOURCES

CALGREEN

DESCRIPTION

The [California Green Building Standards Code](#) (CALGreen) is a statewide mandatory construction code that will come into effect on January 1, 2011 for *new construction*. Although CALGreen is only required for new construction, it is important to be familiar with the code. These regulations will aim to reduce greenhouse gas emissions, energy consumption, and water use in California. It will be statutorily enforced by local agencies. It is not a rating or point based system like LEED. Tier 1 and Tier 2 are voluntary and achieve more green efficiencies than a building complying solely with mandatory green standards.

New requirements for new buildings constructed in California include:

- Reduce water consumption by 20%
- Divert 50% of construction waste from landfills
- Install low pollutant-emitting materials
- Separate water meters for non-residential buildings' indoor and outdoor water use

GREEN RETROFIT PROGRAM

DESCRIPTION

As part of the 2009 American Recovery Act Funds, \$250 million in grants and loans for energy retrofitting and green investments was allocated for the Green Retrofit Program. The grants and loans were made available through HUD's Office of Affordable Housing Preservation (OAHP) for eligible property owners to make energy and green retrofit investments.

Although the program has exhausted all available funds, the guidelines it created for green retrofits are still available and are extremely useful resources for multifamily property owners.

Green Retrofit Program forms and checklists are available for download on toolkit CD.

For additional information and all downloadable forms please visit [HUD's website](#).

4 LOCAL UTILITY REBATES



Aside from federal, state and private sources, local utility companies throughout the Southern California region also provide incentives for green retrofitting. The following section provides information on multifamily retrofitting incentives specific to local utility companies.

LIST OF SOUTHERN CALIFORNIA UTILITY PROVIDERS



LA Department of Water & Power (LADWP)



Pacific Gas and Electric (PG&E)



San Diego Gas and Electric (SDGE)



Southern California Edison (SCE)



Southern California Gas Company (SCGC)

4 LOCAL UTILITY REBATES

GREEN LA PROGRAMS

DESCRIPTION

Consumer Rebate Program

Rebates for energy-efficient products.

[Website](#)

LADWP Compact Fluorescent Light Bulb Distribution

LADWP representatives will be out distributing two energy saving bulbs to all of their residential customers. [Website](#)

REfrigerator Turn-In and REcycling (RETIRE) Program

Turn in your old refrigerator or freezer and receive \$35. [Website](#)

Residential Water Conservation Rebate Program

Rebates for products that conserve water. [Website](#)

Trees for a Green LA

In partnership with Million Trees LA, Los Angelinos can receive free shade trees. [Website](#)

Green Power Program

Support renewable energy by dedicating 20 to 100% of your electricity to come from cleaner sources than coal and nuclear. [Online Application here](#)



Los Angeles
Department of
Water & Power

Low Income Refrigerator Exchange Program

Low Income customers can replace their old, inefficient refrigerators with a new energy saving model. [Website](#)

Solar Power Incentive

The LADWP Solar Photovoltaic Incentive Program provides an incentive payment to LADWP customers that purchase and install their own solar power PV systems. [Website](#)

Power Quality Consulting

The Power Quality business support team performs troubleshooting, testing, analysis, evaluation, and provides solutions to power quality complaints from our residential, commercial, and industrial customers. [Website](#)

MORE INFORMATION

For more information on LADWP and its Green Programs, [visit their website](#).

4 LOCAL UTILITY REBATES

PACIFIC GAS & ELECTRIC COMPANY



ABOUT PG&E

Pacific Gas and Electric Company, incorporated in California in 1905, is one of the largest combination natural gas and electric utilities in the United States.

The company provides [natural gas](#) and [electric service](#) to approximately 15 million people throughout a 70,000-square-mile service area in northern and central California.

PG&E SERVICE AREA

Service area stretches from Eureka in the north to Bakersfield in the south, and from the Pacific Ocean in the west to the Sierra Nevada in the east.

MF RESIDENTIAL ENERGY EFFICIENCY REBATES

DESCRIPTION

The Energy Efficiency Rebates for Multifamily Properties program encourages the installation of qualifying energy-efficient products in individual tenant units and in common areas of residential apartment buildings, mobile home parks, and condominium complexes.

WHO CAN APPLY

Multifamily property owners and managers of existing residential dwellings that contain two or more units.

MORE INFORMATION

For further information and details on how to apply, please call PG&E's Smarter Energy Line at 1(800) 933-9555 to obtain the specifications for qualifying products and to receive an Energy Efficiency Rebates for Multifamily Properties Packet.

[PG&E Website.](#)

[PG&E MASH website](#)

[Online Application Form](#)

[Financial Assistance Programs](#)

4 LOCAL UTILITY REBATES

SAN DIEGO GAS & ELECTRIC COMPANY



ABOUT SDG&E

Incorporated in 1881, the San Diego Gas Company serves the seventh largest city in the country. The company has grown from an original 89 to 775,000 gas customers and from none to 3 million electric customers.

San Diego Gas & Electric (SDG&E) is a regulated public utility that provides service in San Diego and south Orange County.

SDG&E SERVICE AREA

The SDG&E service area contains the southern portion of Orange County and all of San Diego County.

CALIFORNIA CENTER FOR SUSTAINABLE ENERGY

DESCRIPTION

The California Center for Sustainable Energy (CCSE) is the California Solar Initiative Program Administrator for the Multifamily Affordable Solar Housing (MASH) program in the SDG&E service territory. CCSE offers professional advice and cost-cutting strategies to help consumers and industry professionals implement energy efficiency solutions at home, work and play. CCSE also helps business customers evaluate their facility designs and consumption practices to identify sustainable, cost-saving opportunities that support healthy, high-performance communities.

MORE INFORMATION

For more information, please [visit their website](#).

4 LOCAL UTILITY REBATES

SOUTHERN CALIFORNIA EDISON



An EDISON INTERNATIONAL Company
San Onofre Nuclear Generating Station

ABOUT SCE

Southern California Edison provides reliable electric service to central, coastal and southern California. SCE has award-winning energy efficiency programs to help customers stretch their energy dollars.

SCE SERVICE AREA

Southern California Edison (SCE) is one of the nation's largest electric utilities, serving more than 14 million people in a 50,000 square-mile area of central, coastal and Southern California, excluding the City of Los Angeles and certain other cities. Based in Rosemead, California, the utility has been providing electric service in the region for more than 120 years. SCE's service territory includes more than 180 cities.

MF ENERGY EFFICIENCY REBATE PROGRAM

DESCRIPTION

SCE's Residential Multifamily Energy Efficiency Rebate Program offers a variety of incentives for energy efficiency improvements to property owners and managers.

WHO CAN APPLY

The energy efficiency improvements are to be used for retrofit existing multifamily properties of two or more units.

HOW TO APPLY

Rebate applications are accepted on a first-come first-served basis. The program is effective until December 31, 2011, until funding is exhausted, or until the program is suspended by the California Public Utilities Commission, whichever occurs first.

MORE INFORMATION

For more information on SCE and its Multifamily rebate programs, [visit their website](#).

4 LOCAL UTILITY REBATES

SOUTHERN CALIFORNIA GAS COMPANY



ABOUT SCGC

Southern California Gas Company (SoCalGas) is the nation's largest natural gas distribution utility company. It started more than 140 years ago and delivers clean, safe and reliable natural gas to customers throughout Southern California.

SCGC SERVICE AREA

The company's service territory encompasses approximately 20,000 square miles in diverse terrain throughout Central and Southern California, from Visalia to the Mexican border.

MULTIFAMILY REBATE PROGRAM

DESCRIPTION

The Multifamily Rebate Program offers rebates for the installation of qualified energy-efficient products in apartment dwelling units and common areas of apartments, condominium complexes and mobile home parks.

WHO CAN APPLY

Multifamily Housing properties. Multifamily rebates are available through mail-in rebates. Before purchasing energy efficient equipment and/or appliances, make sure they meet rebate specifications listed on application. Download welcome kit [here](#).

MORE INFORMATION

Call 1.888.431.2226 or email EIC@semprautilities.com.

Additional information can be found on [their website](#).

4 LOCAL UTILITY REBATES

RESIDENTIAL GREEN BUILDING STANDARDS

DESCRIPTION

Los Angeles Multifamily Hub compiled a checklist that compares the green standards and requirements of LEED for Existing Homes, [Enterprise Green Communities](#), and Energy Star. Categories include Water Conservation, Energy Efficiency, Healthy Living Environments, Operations and Maintenance, Sustainable Sites, and Materials and Resources.

MORE INFORMATION

The full checklist will be available for viewing and printing online.

CHECKLIST SAMPLE



	LEED	Enterprise	Energy Star
WATER EFFICIENCY AND CONSERVATION			
Water-conserving Appliances and Fixtures	X	X	X
Efficient Irrigation and Landscaping	X	X	
Cooling tower water management	X		
Water Performance Measurement	X		
ENERGY EFFICIENCY AND ATMOSPHERE			
Efficient Energy Use Enterprise: <i>Perform an energy analysis of existing building condition, estimate costs of improvements, implement measures that will improve building energy performance by 15 percent from pre-renovation figures.</i> LEED: <i>See guidebook for details</i>	X	X	
Energy Star Appliances	X	X	X

4 LOCAL UTILITY REBATES

SOLAR ELECTRICITY PHOTOVOLTAIC SYSTEM CHECKLIST

DESCRIPTION

Los Angeles Multifamily Hub has created a checklist to aid property owners in the due diligence requirements mandated under HUD and the application process for solar electric photovoltaic systems.

MORE INFORMATION

The full checklist is available for viewing and printing online at **WEBSITE**

CHECKLIST SAMPLE

SCOPE OF WORK/ROLE	Due Diligence Requirements			WORKPRODUCT/OUTCOME
	Yes	No	NA	
Scope of Work Elements				Detail Description/Comments
BUSINESS MODEL				
Owner Purchase				Owner responsible for first cost.
Power Purchase Agreement				PPA Provider responsible for first cost.
OWNER DUE DILIGENCE				
Green Building Assessment				
Energy Efficiency Assessment				
Building & Roof Assessment				
Energy Audit				
Integrated Pest Management Report				
Operation and Maintenance Plan				
Reserve for Replacement Analysis				
Insurance Risk Assessment				
PPA Provider Background Check				
Management/BOD Discussion of Exhibit 1				
Project Team:				
• Project Leader				Asset/Project Manager
• Green Consultant				LEED or Other
• Architect				Structural/MEP/Landscape
• Civil Engineer				Utility Consultant
• Green Contractor				C-10/C-46/Both State License
• Utility Service Provider				
• Energy HERS Rater				Performance Measurement/Verification
• Lender(s)				
• Investor				
• Rebate/Grant Provider				
• Insurance Carrier				
• City Department (s)				

5 GET GREEN!



After you have identified the various resources available for retrofitting your property, you will need to:

1. Conduct a physical condition assessment.



2. Retrofit your property.



3. Resident and management training.



4. Track you utility bills and savings!

5 GET GREEN! THE NEXT STEPS

1. CONDUCT A PHYSICAL ASSESSMENT

The first thing you will have to do, after assessing your available finances, is identify a third-party contractor to conduct a Physical Condition Assessment, a.k.a. Physical Needs Assessment, on your property. Enterprise Green Communities has a tool to identify qualified professionals located on their [Technical Assistance Providers Database](#).

According to HUD's Green Retrofit Program, a Green Retrofit Physical Condition Assessment means a project-specific, on-the-ground evaluation by a qualified independent third party(ies) procured by the **PAE**. Each assessment shall include an evaluation of traditional replacements, of potential Green Retrofits, an energy audit, an insect pest management inspection, a 20 year projection of capital needs, and other components as **HUD may require**.

The [Enterprise Retrofit Audit Protocol](#) determines if energy and water conservation measures can be put in place to save enough money to pay for debt service that finances the improvements.

Important information can be found on HUD's [Green Retrofit Program website page](#). Although the program has exhausted all available funds, the forms and checklists are useful.

2. RETROFIT YOUR PROPERTY

Enterprise Green Communities has an excellent tool to identify qualified and professionals. Simply go to their [Technical Assistance Providers Database](#).

3. RESIDENT AND MANAGEMENT TRAINING

Resident education is essential to ensure that you and your residents continue to reap the full benefits of your energy saving retrofits. There are several customizable template resident and management staff manuals available for download on the CD. Enterprise Green Communities offers grants of up to 5,000 dollars to assist in resident and management trainings.

4. TRACK YOUR UTILITY BILLS AND SAVINGS!

6 STAY GREEN!



Once you have made green retrofits to your property, resident and property management staff education is essential to ensure that you and your residents continue to reap the full benefits of your energy saving retrofits.

There are several organizations and companies that offer energy tracking services, such as:

[Peregrine Energy](#), an energy consulting company. customers are organizations with complex energy pictures — cities, states, utilities, nonprofits, and businesses. HUD works with them to reduce energy use, costs, and emissions.

[WegoWise](#) allows you to understand your entire portfolio's water and energy usage quickly and easily.

[Energy Star's Portfolio Manager](#) allows you to track and assess energy and water consumption across your entire portfolio of buildings in a secure online environment.

[Energy Score Card](#), an online energy benchmarking and management tool for people who make decisions about energy use in buildings, including property managers, owners, energy consultants and utilities.

6 STAY GREEN!

GUIDES AND PUBLICATIONS | ENTERPRISE

ENTERPRISE GREEN RESIDENT MANUALS

All templates are [available online](#).



Clara Vista Townhomes, an Enterprise Green Communities affordable housing project. Source: Flickr.

TEMPLATE FOR HEALTHY HOME GUIDE RESIDENTS

This Template version of the Healthy Home Guide is based on the guide written for residents of The Plaza Apartments.

CHUSKA APARTMENTS HEALTHY HOME GUIDE

A Green Operations & Maintenance Manual for Chuska Apartments was developed for use by the development's management and maintenance staff, along with a Healthy Home Guide for the project's residents.

NEW SAN MARCO GREEN GUIDE

Created for residents of New San Marco, a green affordable housing development in Duluth, Minnesota, this manual can be used as a model or sample for other green developers and owners.

NORTHERN COMMUNITIES LAND TRUST GREEN HOMEOWNERS'S MANUAL

Northern Communities Land Trust Green Homeowner's manual serves as a maintenance guide for your homes and its green features.

TROLLEY SQUARE'S LIVING GREEN GUIDE

Homeowner's Rehab Inc./Trolley Square LLC Created for the residents of Trolley Square, a green affordable housing development in Cambridge, Mass., this manual can be used as a model or sample for other green developers and owners. [Also available in Spanish.](#)

6 STAY GREEN!

GUIDES AND PUBLICATIONS | ENTERPRISE

ENTERPRISE GREEN OPERATIONS AND MAINTENANCE MANUALS

This tool is intended to help in developing a manual that describes a project's green features for property management staff. An Operations and Maintenance manual is essential to optimal building performance and energy savings. It is especially important to ensure knowledge about a project's green features and mechanical systems.



Spring Terrace Apartments, one of Enterprise's Green Communities. Source: Flickr.

TEMPLATE FOR GREEN OPERATIONS AND MAINTENANCE

This Template has been developed for use by the development's management and maintenance staff, along with a Healthy Home Guide for the project's residents.

GREEN OPERATIONS AND MAINTENANCE FOR THE ESSEX

This manual serves as a standard reference guide for The Essex's property management and maintenance staff, and serves as a good example for sustaining

GREEN OPERATIONS AND MAINTENANCE FOR THE PLAZA APARTMENT

Created for the residents of the Plaza, a green, affordable housing development in San Francisco, Cal., this manual can be used as a model or sample for other green developers and owners

GREEN OPERATIONS AND MAINTENANCE FOR THE NEW SAN MARCO APARTMENTS

Created for the residents of New San Marco, a green affordable housing development in Duluth, Minn., this manual can be used as a model or sample for other green developers and owners.

6 STAY GREEN!

GUIDES AND PUBLICATIONS | ENTERPRISE

OTHER RESOURCES

SUSTAINABLE BUILDING TECHNICAL MANUAL GREEN BUILDING DESIGN, CONSTRUCTION, AND OPERATIONS

[Sustainable Building Technical Manual: Green Building Design, Construction, and Operations](#), produced by Public Technology Inc. and the US Green Building Council. Sponsored by U.S. Department of Energy, U.S. Environmental Protection Agency.

SUSTAINABLE BUILDING TECHNICAL MANUAL

The Sustainable Building Technical Manual is a publication of the DOE, EPA, US Green Building Council and Public Technology. This manual offers architects, developers, building owners, government officials, and others practical, step-by-step advice on sustainable buildings written by some of the foremost experts in the field. Download [here](#).



The Sierra Bonita Apartments in West Hollywood is a low-income senior housing complex that includes a variety of sustainable features, including solar panels and energy efficient appliances. Source: Flickr.

6 STAY GREEN!

GUIDES AND PUBLICATIONS | ENTERPRISE

TRAINING IN A BOX

RESIDENT CURRICULUM

Training in a Box (TIAB) is a self-guided curriculum focused on resident engagement. Each exercise emphasizes green operating principles and actionable steps residents can undertake in their homes. Instructional presentations and activities are designed to be led by a property manager or resident services coordinator. The TIAB includes four educational modules delivered in a classroom setting, with online videos and e-learning resources to support the trainer and enrich the education experience of residents.

GREEN OPERATIONS & MAINTENANCE CURRICULUM

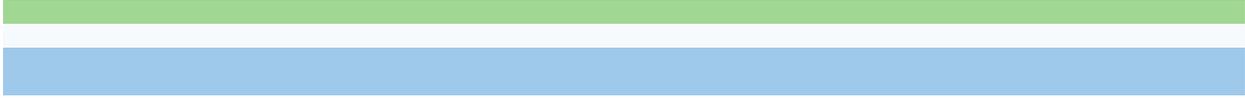
Training in a Box (TIAB) offers four educational modules designed for property management training. The curriculum focuses on benchmarking energy and water use; strategies to reduce energy use in heating, cooling and lighting; steps owner and managers can undertake to create healthier housing; and ways to reduce the use of natural resources. Each module is offered through classroom exercises and case studies, with related online videos and e-learning resources.

GREEN RESIDENT EDUCATIONAL CARDS

This interactive educational toolkit includes a set of approximately 24 resident engagement and training cards focused on green and healthy living (and templates for local customization); plug and play DVDs that provides animated versions of the cards; and a resource data disk including individual illustrations and other learning tools to create additional cards, signage, and/or training materials & activities.

2011 MANUALS & GUIDES

Enterprise will have more resources on manuals and guides in 2011. Please refer to their [website for updates](#).



**Department of Housing and Urban Development
Los Angeles Multifamily Hub**

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