

MULTIFAMILY GREEN TOOLKIT

U.S. Department of Housing and Urban Development

Los Angeles Multifamily Hub



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New construction. 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 BUILD GREEN?



Green Building reduces a development's impact on the environment, costs less to operate, and improves the residents' quality of life!

WHAT IS GREEN BUILDING?

Green buildings are designed to reduce the overall impact of the built environment on human health and the natural environment by:

Efficiently using energy, water, and other resources

Protecting occupant health

Reducing waste, pollution and environmental

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

Green development...

Makes Economic Sense!

- Green development reduces water and energy costs.
- Green development adds marketability and profit value to your property
- Green development generates economic activity by through green collar jobs

Helps Preserve and Protect the Environment!

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

Improves the Quality of Life of Low-Income Residents!

- Green development improves the quality of life for tenants by providing healthier living environments.

GREEN DEVELOPMENT

There are hundreds of green building techniques and products one can integrate into a home. Some green building techniques include:

- Infill development or development within walking distance of key amenities
- Integrating water-conserving design elements, such as low-flow faucets and dual-flush systems
- Using energy efficient appliances, monitoring energy usage, installing lighting timers, and using renewable energy sources
- Using green materials, such as reclaimed lumber, recycled content material, water permeable walkways and driveways, and using heat-reducing roofing
- Measures to improve indoor air quality, such as low-VOC paints and installing effective ventilation and exhaust fan systems
- Tenant education to stay green!

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

To ensure HUD reaches its goal of promoting sustainable development, we will consider a variety of green rating systems and certifications when reviewing proposals for new development. The following rating tools offer developers, funders, and residents a way to measure the relative “greenness” of new developments. HUD does not endorse one rating system over another and the toolkit does not offer an exhaustive overview of rating systems.



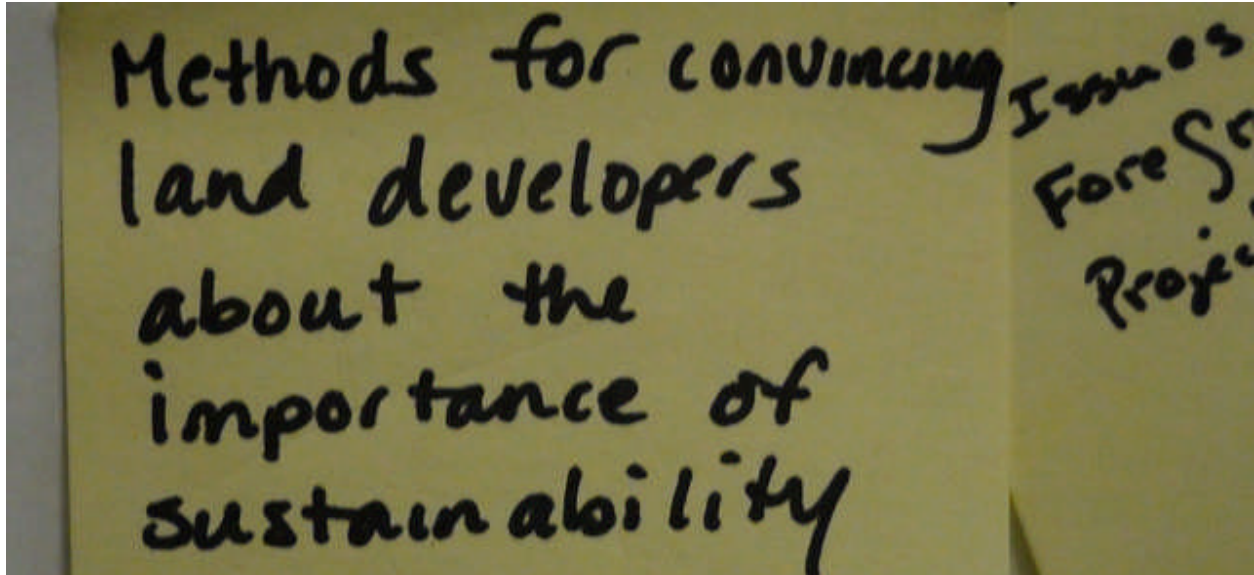
There are a number of opportunities for renewable energy in the state of California, particularly with solar energy in Los Angeles. Source: Flickr.

Green Development 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 choose from, this toolkit will introduce you to CalGreen Tier One and Tier Two criteria, Enterprise Green Communities, LEED, Energy Star, and GreenPoint Rated.

3 GREEN RATINGS



To ensure HUD reaches its goal of promoting sustainable development, we will consider a variety of green rating systems and certifications when reviewing proposals for new development. The following rating tools offer developers, funders, and residents a way to measure the relative “greenness” of new developments. HUD does not endorse one rating system over another and the toolkit does not offer

CALGREEN
LEED
ENTEPRISE GREEN COMMUNITIES
ENERGY STAR
GREEN POINT RATED

3 GREEN RATINGS

CALGREEN

CALIFORNIA BUILDING STANDARDS COMMISSION

The California Green Building Standards Code (CALGreen) is a statewide mandatory construction code that will come into effect on January 1, 2011. 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. However, HUD will look to see if you move to Tier 1 or 2. **Tier 1 and Tier 2 are voluntary and achieve more green efficiencies** than a building complying solely with mandatory green standards.

New requirements for every new building 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

MORE INFORMATION

For more information on the California Building Standards Commission or CalGreen, [please visit their website](#).

U.S. GREEN BUILDING COUNCIL

LEADERSHIP IN ENERGY AND ENVIRONMENTAL DESIGN

A LEED-certified home is designed and constructed in accordance with the rigorous guidelines of the LEED for Homes green building certification program. LEED for Homes is a consensus-developed, third party-verified, voluntary rating system which promotes the design and construction of high-performance green homes.

MORE INFORMATION

For more information on the UCBC or LEED, [visit their website](#).

3 GREEN RATINGS

ENTERPRISE

GREEN COMMUNITIES

Green projects must meet a minimum number of Green Communities criteria that include:

- Integrated Design
- Site, Location and Neighborhood Fabric
- Site Improvements
- Water Conservation
- Energy Efficiency
- Materials Beneficial to the Environment
- Healthy Living Environment
- Operations and Maintenance
- To learn if your project has the potential for green classification and Green Communities grants and funding, see the full criteria and requirements.

MORE INFORMATION

For more information on Enterprise and its Green Communities program, [visit their website](#).

ENERGY STAR

ENERGY STAR NEW HOMES

To earn the ENERGY STAR, a home must meet strict guidelines for energy efficiency set by the U.S. Environmental Protection Agency. These homes are at least 15% more energy efficient and include additional energy-saving features that typically make them 20–30% more efficient than standard homes. Homes achieve this level of performance through a combination of energy-efficient improvements, including:

- Effective Insulation Systems
- High-Performance Windows
- Tight construction and Ducts
- Efficient Heating and Cooling

To ensure that a home meets ENERGY STAR guidelines, third-party verification by a certified Home Energy Rater is required.

MORE INFORMATION

For more information on the Energy Star or its Energy Star New Homes program, [visit their website](#).

3 GREEN RATINGS

BUILD IT GREEN

GREEN POINT RATED

How can you tell if a home really is green? GreenPoint Rated removes the guesswork by having a Certified GreenPoint Rater evaluate a home's green features allowing homes to be compared on a level playing field. A GreenPoint Rated home is graded on five categories:

- Resource Conservation
- Indoor Air Quality
- Water Conservation
- Community
- Energy Efficiency

MORE INFORMATION

For more information on Build It Green or its Green Point Rated system, [visit their website](#).



The Los Angeles Multifamily Office is dedicated to promoting green, sustainable design and development. We strongly encourage all of our partners to develop up to the suggested green standards, or any comparable ones.

Developments that commit to building to a green standard will be given priority processing.

The following section outlines various resources, incentives, and advice for building green.

4 GREEN RESOURCES



There are many different government and non-government financial incentives available to pursue green development. The following section outlines the major incentive programs in the Southern California

BUILD GREEN LOS ANGELES!

1

ASSESS

your needs,
finances, and
incentives.

2

BUILD

your property
to green
standards.

3

SAVE

money and the
environment.

4 RETROFIT RESOURCES

LIST OF GREEN RESOURCES

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4 GREEN RESOURCES



EPA GREEN BUILDING

DESCRIPTION

EPA's **Green Building** website is designed to give users a convenient gateway from which to access numerous EPA programs and topics related to environmentally-friendly building. These programs include ENERGY STAR, Indoor Air, Smart Growth, Environmentally Preferable Building Products and more -- including a new [Construction and Demolition \(C&D\) Debris website](#).

MORE INFORMATION

For more information on the EPA's Green Building program, [visit their website](#).

EPA GREEN HOMES

DESCRIPTION

EPA's **Green Homes** web site provides information:

- on a wide-range of options for greening a home.
- for all types of residents and circumstances, including renters,
- for homeowners who want to "green" their homes to different degrees, with varying levels of resources and effort, from minor changes to major renovations.

MORE INFORMATION

For more information on the EPA's Green Building program, [visit their website](#).

4 GREEN RESOURCES

LA DWP & LA DOE

DESCRIPTION

The Sustainable Design Implementation Program provides information regarding sustainable design buildings, useful linkages to other resources relating to sustainable design, city green building projects, etc.

MORE INFORMATION

For more information on LADWP & LADOE's Sustainable Design Implementation Program, [visit their website](#).



The Sun Valley Branch Library is a project under the Sustainable Design Implementation Program and is LEED Gold certified.

CENTER OF EXCELLENCE FOR SUSTAINABLE DEVELOPMENT

DESCRIPTION

To help communities design and implement a vibrant new approach to planning, the US Department of Energy has created a Center of Excellence for Sustainable Development. This new service assists communities throughout the United States by providing excellent consultation and information on sustainable de-



MORE INFORMATION

For more information on the Center of Excellence for Sustainable Development, [visit their website](#).

4 GREEN RESOURCES

GREEN LOAN FUND



DESCRIPTION

LISC's Green Development Center has created a Green Loan Fund to support strategies that implement green building features for local development projects. Financing tools include:

- Predevelopment financing: to help pay the cost of predevelopment activities, including but not limited to green planning and preparation, consultant fees, etc. up to \$30,000.
- Construction/Mini-Perm financing: to help pay the costs of critical green features at risk of elimination from the development plan due to budget pressures up to \$75,000

WHO CAN APPLY

Eligible projects include any neighborhood real estate project throughout LISC's local office network. At a minimum, multifamily project above 4 stories or a non-residential project must achieve the minimum points for a LEED "certified" level under the appropriate USGBC LEED program (actual certification is not required). Local green building standards are also acceptable upon approval by the LISC's Green Development Center.

HOW TO APPLY

Financing will be done through local LISC offices. Funds are available on a first come-first served basis. Submit financing requests internally.

For complete details on Green Loan Funds, please contact your local LISC office or [Julia Prange](#).

MORE INFORMATION

For more information about the Green Loan Fund and LISC, [visit their website](#).

4 GREEN RESOURCES

CALIFORNIA ADVANCED HOMES PROGRAM (CAHP)

DESCRIPTION

The CAHP is a residential new construction program that focuses on energy efficiency, sustainable design/construction, green building practices and technologies. The program offers design assistance, cash incentives, program coordination, and educational opportunities. The program is administered by local utility companies for the 2010-2012 program years. It offers developers an escalating incentive for units of energy saved based on percentage improvement above Title 24, and incentives for third party HERS verification. Incentives are listed below.

HOW TO APPLY

Application details and instructions differ between utility company and are currently being updated. Please contact your local utility service provider for more information

MORE INFORMATION

PG&E: Visit their [website](#), review their [handbook](#), or contact them at 866-352-7457.

SCE: Visit their [website](#), review their [handbook](#), or contact them at 626-633-3466.

SCGC: Visit their [website](#) or contact them at 866-563-2637.

SDGE: Visit their [website](#) or contact them at 866-631-1744.

Pacific Gas and Electric (PG&E)	Rebates for qualifying new homes, including a 10% ENERGYSTAR New Homes Program Bonus for ENERGYSTAR Homes that meet EPA requirements.
Southern California Edison (SCE)	Tiered rebates for qualifying new single and multi-family homes.
Southern California Gas Company (SCGC)	Tiered rebates for qualifying new single and multi-family homes.
San Diego Gas and Electric (SDGE)	Tiered rebates for qualifying new single and multi-family homes.

4 GREEN RESOURCES

ENVIRONMENTLA

DESCRIPTION

As part of Los Angeles' efforts to go green, [EnvironmentLA](#) provides information about projects and programs that are making Los Angeles move towards a more sustainable and environmentally friendly city. In addition to the city's many sustainable projects and programs, the city's website also contains educational information on climate change, sustainability, green building, and tools for businesses to go green. As recognition of its success, Los Angeles has already met the Kyoto targets for reducing greenhouse gases, four years ahead of schedule. Together, Angelenos are working towards making LA the Greenest Big City in the nation.

MORE INFORMATION

For more information on Green Infrastructure [Best Management Practices](#) (BMP's).



DSIRE: STATE, LOCAL AND FEDERAL INCENTIVES

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. Resources are separated by states, and provide user-friendly access to a large portfolio of incentives. It is an ongoing, frequently updated project of the US Department of Energy, the N.C. Solar Center and the Interstate Renewable Energy Council.

MORE INFORMATION

For more information, visit DSIRE's [webpage for California](#), and the [main homepage](#).

4 GREEN RESOURCES

PRIORITY PLAN CHECK PROGRAM



DESCRIPTION

Los Angeles Department of Building Safety is offering Priority Plan Check (to be given priority in assigning to a plan check engineer ahead of all other plans for which off-hour fees were not paid) for qualifying Green Building projects. Priority Plan Check service will expedite the start of the plan check work that will be performed during regular working hours.

WHO CAN APPLY

To qualify, the following must be met:

- The project is registered with the U.S. Green Building Council (USGBC). Proof of registration shall be copied by the applicant onto the first sheet of plans.
- The project is not subject to the “Green Building Ordinance”.

- The project meets the Leadership in Energy and Environmental Design (LEED) rating system at The “Certified” level or higher. The latest version of LEED “Registered Project Checklist” shall be copied by the applicant onto the first sheet of the plans indicating the point count.
- A “Green Building Declaration” signed by the owner, Architect of Record and the LEED Accredited Professional affirming that the project has been registered with USGBC; will be designed and constructed to meet the LEED rating system at the “Certified” level or higher; and will obtain certification to that effect from USGBC.

MORE INFORMATION

For more information about priority plan check for green buildings, please download [this fact sheet](#).

4 GREEN RESOURCES

NEIGHBORHOOD STABILIZATION PROGRAM (NSP)

DESCRIPTION

LAHD is adhering to the Enterprise Community Partners, Green Communities criteria for NSP properties. Green Communities is aligned with the LEED (Leadership in Energy and Environmental Design) Green Building Rating System® and is compatible with many leading state and local green building programs. Each scope of work in the NSP program prescribes:

1. Bamboo flooring (recycled content ceramic tile flooring)
2. Ultra low flow fixtures (faucets)
3. Tankless water heater
4. Ultra low flow toilets
5. Ultra low flow showerheads
6. Air seal entire building & insulate exterior walls, ceilings, sub-floors
7. New roof-Energy Star qualified reflective roofing shingles
8. Dual-glazed, low-e, Energy Star rated windows
9. 90% efficient heating, ventilating, and air conditioning (HVAC) systems

11. Energy Star rated fluorescent lighting fixtures
11. Energy Star rated appliance
12. Drought tolerant landscaping
13. Wired for Solar
14. Lead-based paint remediation

Additional green actions being followed are:

- Use of low VOC paints, primers, caulking, sealers, stains and finishes
- Recycling requirements for construction waste (Certified Mix Debris Processing Facility)
- Certified HERS (Home Energy Rating System) rater to conduct pre and post construction diagnostic testing

MORE INFORMATION

For more information about the Neighborhood Stabilization Program in Los Angeles, [visit their website](#).

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



James Wood Apartments in Los Angeles, an Enterprise Green Communities project.

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

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, visit Enterprise's [Green Communities webpage](#).

4 GREEN RESOURCES

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 greenspace 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

The Home Depot Foundation is currently undergoing our 2011 strategic planning process and our grant cycles are temporarily on hold.

AFFORDABLE HOUSING BUILT RESPONSIBLY GRANT

DESCRIPTION

Through the Affordable Housing Built Responsibly grant program, The Home Depot Foundation invests millions of dollars each year in nonprofit organizations whose missions align with the Foundation's interests in supporting the production and preservation of affordable, efficient and healthy housing.

HOW TO APPLY

The Home Depot Foundation is currently undergoing our 2011 strategic planning process and grant cycles are temporarily on hold. Please check back at the end of March for the 2011 grant cycle schedule.

MORE INFORMATION

For more information on both grant programs, visit the [Home Depot Foundation](#).

4 GREEN RESOURCES

SMART GROWTH AND LIVABLE COMMUNITIES

DESCRIPTION

The Funders' Network for Smart Growth and Livable Communities is a non-partisan, not-for-profit organization that exists to inspire, strengthen and expand philanthropic leadership and funders' abilities to support organizations working to improve communities through better development decisions and growth policies. Organizations can participate in an active community of funders, learn about different policies and tools, as well as find events and conferences to attend..

MORE INFORMATION

For more information on the Funder's Network, [visit their website](#).

PROGRAMS IN THE CITY OF LOS ANGELES

DESCRIPTION

[An Action Plan for Advancing Sustainable Design Practices](#)

The Sustainable Building Initiative is a project jointly sponsored by the Bureau of Engineering and the Bureau of Sanitation. The initiative will invest more than \$1 billion in the design, renovation, and construction of municipal and public facilities over the next five years.

[Los Angeles Brownfield Program:](#)

The goal of Los Angeles' Brownfields Program is to develop effective strategies to enable redevelopment of brownfields throughout Los Angeles but particularly in disadvantaged communities and to incorporate these strategies into the City's normal redevelopment process.

[Green Infrastructure in the City of Los Angeles](#)

Green Infrastructure for Los Angeles addresses urban runoff and water supply through low impact development.

4 GREEN RESOURCES

TAX INCENTIVE ASSISTANT PROJECT (TIAP)

DESCRIPTION

The Tax Incentive Assistance Project (TIAP) provides information for consumers and businesses to make use of the federal income tax incentives for energy efficient products and technologies (specified in the Energy Policy Act of 2005).

A credit of \$2000 is available to home builders who build homes (including both site-built and manufactured homes) projected to save at least 50% of the heating and cooling energy of a comparable home that meets the standards of the 2004 International Energy Conservation Code (the 2003 code including the 2004 supplement). A \$1000 credit is available to manufactured home producers for models that save 30% or that qualify for the federal Energy Star Homes program.

Note: This credit expired at the end of 2009, but a recent bill extended the tax credit to cover 2010 and 2011. See the home page for details; specific eligibility information will be posted in January.

WHO CAN APPLY

The home qualifies for the credit if:

- It is located in the United States.
- Its construction is substantially completed after August 8, 2005.
- It meets the statutory energy saving requirements.
- It is acquired from the eligible contractor after December 31, 2005 and before January 1, 2008 for use as a residence.

HOW TO APPLY

To apply, an [Energy Efficient Home Credit form](#) must be completed.

MORE INFORMATION

For more information, please visit the [webpage on Energy Tax Incentives](#).

4 GREEN RESOURCES

SOLAR PURCHASING MODELS



Solar Shingles on residential roof, one of many solar features. Source: Flickr

DESCRIPTION

Several private organizations have developed solar purchasing models 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. By purchasing solar equipment together as a unit, group purchasing helps to reduce the overall cost a household or individual would incur installing solar panels alone. 1BLOG participants save an average 15% off the total installation cost. Many cities have already joined 1BOG's system of active solar discounts, including San Diego and Los Angeles.

MORE INFORMATION

For more information on group purchasing, please [visit 1BOG](#).

4 GREEN 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, and there is an easy-to-understand section on energy efficiency in the community and alternative energy sources.

PARKING REDUCTIONS

DESCRIPTION

Fear of traffic congestion and overcrowded street parking has led many cities to establish minimum parking requirements, often resulting in excessive amounts of off-street parking. Aside from creating excess parking and adding to congestion by encouraging automobile usage, parking requirements have tremendous negative impacts on development, especially affordable housing. The Southern California Association of Non-Profit Housing has a parking guide to help affordable housing developers.

GREEN ROOFS

DESCRIPTION

Green roofs provide a host of potential benefits to building owners and the surrounding community. During warm weather, green roofs are cooler than conventional roof surfaces, thus helping to reduce energy consumption for air conditioning and mitigating the urban heat island effect which produces higher temperatures in core urban areas (where most surfaces are covered by concrete and pavement) than in surrounding, less developed areas.

Like other forms of vegetation, green roofs also help filter pollutants such as fine particulate matter and toxic gases from the air and their cooling effect can help reduce ozone pollution (smog). Green roofs also help prevent water pollution by filtering polluted runoff and greatly reducing the total amount of runoff that reaches the storm sewer system.

The City of Los Angeles has a [guide and document](#) with more information about green roofs and their benefits.

4 GREEN RESOURCES

ADDITIONAL RESOURCES

GREEN STANDARDS

DESCRIPTION

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

MORE INFORMATION

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

SAMPLE CHECKLIST



	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

5 GET GREEN!



There are many ways to get green, but ENERGY STAR offers a certification program for new homes. Set by the U.S. EPA, the program has strict guidelines for energy efficiency. Follow the steps to get green:

1. Choose a partner.



2. Select energy-efficient features.



3. Builder constructs home , rater verifies features.



4. Rater qualifies home.

5 GET GREEN! THE NEXT STEPS



Through a Partnership Agreement with EPA, a builder selects a Home Energy Rater to work with to qualify their homes.

1. CHOOSE A PARTNER

It is important for consumers to recognize that an ENERGY STAR builder partner does not necessarily build exclusively ENERGY STAR qualified homes. However, there are also many builders that have made a commitment to building 100% ENERGY STAR qualified homes across their entire operation and developers who require all ENERGY STAR construction in their developments. To find participating builder partners in your area, visit the [ENERGY STAR Partner Locator](#).

2. SELECT APPROPRIATE ENERGY EFFICIENT FEATURES

The builder submits their architectural plans to their Home Energy Rater for review and analysis. The Rater looks for key information on the plans to help the builder choose the best combination of energy-efficient features to ensure that the home will earn the ENERGY STAR label when constructed. [Learn more](#) about the different approaches to selecting features for ENERGY STAR qualified homes.



5 Star Energy Rating home in Michigan. Energy Star rated homes are more energy efficient; a feature of an Energy Star rated home is high-performance windows. Source: Flickr.

5 GET GREEN! THE NEXT STEPS

3. BUILDER CONSTRUCTS HOME | RATER VERIFIES IT

With the energy-efficient features selected, the builder then proceeds with construction of the home. Throughout the construction process, the Rater performs a number of inspections and diagnostic tests to verify the proper installation of the selected energy-efficient features and overall energy performance of the home. [Learn more](#) about the home analysis and inspection process.



Proper wall insulation is another feature of an Energy Star rated home. Source: Build My Own Cabin.

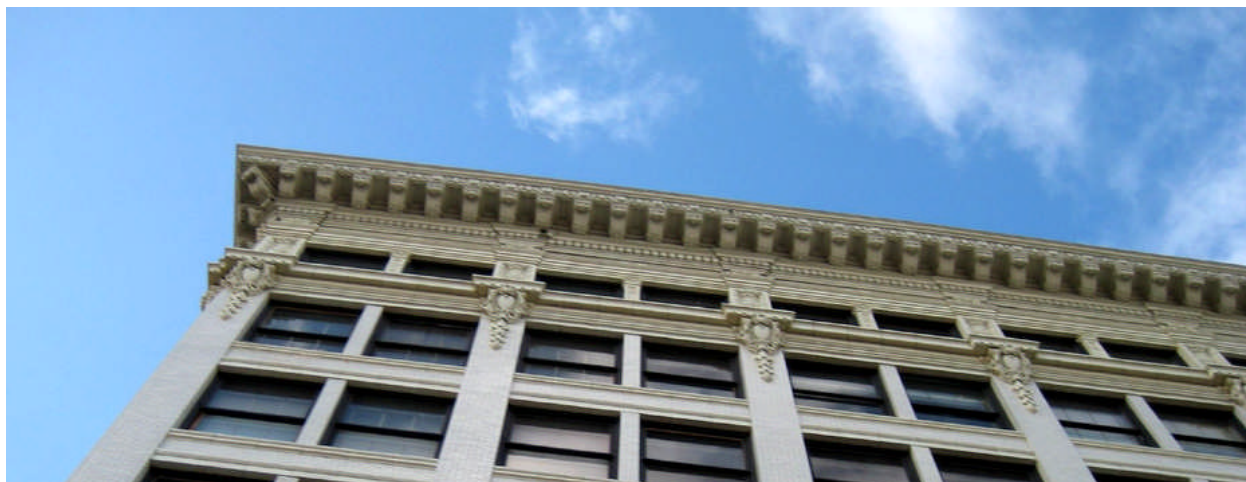


DOE and Energy Star's "Energy Rating" on an appliance. The more stars, the more energy efficient an appliance is. Source: ZUMA Press

4. RATER QUALIFIES HOME

After the Rater completes the final inspection and determines that all requirements have been met, the Rater will provide the builder with an ENERGY STAR label, which is placed on the circuit breaker box of the home. Some builders may also provide a paper certificate or copy of the Home Energy Rating report.

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 GREEN RESIDENT MANUALS

All templates are [available online](#).



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

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 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, an Enterprise Green Community. Source: Flickr.

TEMPLATE FOR GREEN OPERATIONS AND

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

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. You can download a copy of the technical manual [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.



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

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