



# Creating Green Affordable Housing

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## The Challenge

Developing and preserving affordable housing is critical to creating sustainable communities, but local governments face many obstacles. The current national economic crisis has contributed to an unprecedented increase in foreclosures and abandoned properties in many cities. Local governments are faced with the challenge of monitoring these homes and properties to ward against potential crime activity and neighborhood blight. The reduction of revenue from delinquent taxes and liens is a burden to local budgets.

Utilizing funding for green affordable housing practices can provide both long and short-term benefits for local governments, however the

cost of land, materials, and labor for housing production and rehabilitation continues to rise. A primary concern for local governments is that green development may incur higher upfront costs. But it also results in lower operating costs over the life of the building, which is particularly important for low-income residents.

City planners and other municipal staff also face the challenge of learning the definitions and codes for supplies, materials, landscaping, and buildings associated with the green industry.

## Strategies

City officials have only a limited amount of time to devote to the issue of green affordable housing. However, some approaches can be put into practice to help city officials and their staffs create and implement a comprehensive strategy for sustainable development.

Local leaders can support sustainable building initiatives by launching advocacy campaigns for green affordable housing to stakeholders in the community. Residents can be informed about the advantages of green building as well as the long-term cost savings. Additional benefits are improved occupant health, comfort, productivity, and reduction of pollution and landfill waste.

Partnerships for sustainability can be achieved by working with local developers to incorporate green building initiatives into building

policies. City planners can take the lead by incorporating green design practices in all government buildings.

Education assistance and training in green policies for building and developing housing are available through federal, state, and national organizations. By continuing to monitor national trends in green building practices, city staffs can stay on the cutting edge of cost-saving initiatives.

Funding for sustainable affordable housing is available. There are several agencies in the federal government that offer grants for building or retrofitting green design projects. Municipal staff should investigate various grants and loan programs that can be leveraged for sustainable development projects in their communities. (See resources).

## Action Steps

Listed below are some action steps for creating and implementing green affordable housing in your community.

### Education & Advocacy

- Educate the community about the long-term cost savings as well as the benefits for the environment and personal health that come with sustainable development.
- Provide simple cost-saving greening ideas that residents can use in their current housing environments.

### Planning

- Create a uniform set of green building guidelines, checklists, and rating systems for use with affordable housing projects.

- Review policies and procedures in order to implement more “green friendly” alternatives. This includes the general plan, land use ordinances, zone regulations, parking regulations, and building codes.
- Encourage local builders to adopt green building policies. Builders should review their building design and construction process and specifications and investigate where it is possible to make “green” improvements.
- Adopt diverse policy options, including fee waivers and expedited review; business tax credits for for-profit developers; in-lieu fees for developers who do not build green; financing for renewable energy, energy efficiency, and other cost-saving measures.



- Conduct an assessment of properties in the community. Assess the physical condition of city owned properties and explore ways that greening these structures can factor in to the sustainability master plan.

### Partnerships

- Partner with local developers that have a history of smart growth development.
- Involve national and federal organizations as well as local developers throughout the entire building process in order to gain project guidance and support for green development.

### Building Design & the Environment

- Retrofit local government buildings using greening strategies to set a standard for all building projects.

- Consider accessibility to jobs and services by linking to mass transit, bike paths, and other alternative transportation options.
- Create walkable communities. The benefits of walkable communities are realized in less driving and improved health and quality of life for residents.
- Landscape using plants and shrubs native to the area and which require little water.

### Financing

- Seek funding for green development from diverse sources. The federal government offers funding for the development of affordable and green housing through the Department of Housing and Urban Development and the Department of Energy. Additionally, national organizations have loan and grant programs for green affordable housing (See resources).

## QUICK TIPS FOR MAKING HOUSING DEVELOPMENT GREEN:

1. Reuse building materials from other projects, and ensure on-site recycling during construction.
2. Build using recycled material such as engineered lumber, fly ash concrete, steel, recycled tile, or cotton insulation.
3. Landscape using shrubs and plants native to the area to provide shading, wind protection, and noise reduction.
4. Purchase EnergyStar labeled products such as light bulbs, refrigerators, dishwashers, fans, and air conditioners.
5. Use compact florescent lights, motion sensors, daylight sensors, and dimmers whenever possible.
6. Install hard surface flooring as much as possible in order to improve air quality.
7. Install metal roofs that can save energy; be used for rainwater collection; and may qualify for reduced homeowners insurance.

## RESOURCES

### FEDERAL GOVERNMENT;

*U.S. Department of Housing and Urban Development (HUD): [www.hud.gov](http://www.hud.gov)*

#### **Green Retrofit Program for Multifamily Housing:**

Grants and loans will be made available through HUD's Office of Affordable Housing Preservation (OAHP) for eligible property owners to make green retrofit investments in the property to ensure the maintenance and preservation of the property, the continued operation and maintenance of energy efficiency technologies, and the timely expenditure of funds. Physical and financial analyses of the properties will be conducted to determine the size of each grant and loan. Incentives will be made available to participating owners. The terms of the grants or loans will include continued affordability agreements. Grant and loan funds must be spent by the receiving property owner within two years. For more information, the website address is: <http://portal.hud.gov/portal/page/portal/RECOVERY/programs/GREEN>.

#### **Community Development Block Grant Program (CDBG):**

CDBG provides funding to develop housing principally for persons of low- and moderate-income. Eligible activities include neighborhood revitalization; economic development; improved community facilities; infrastructure improvement and affordable housing. For more information, the website address is:

[www.hud.gov/offices/cpd/communitydevelopment/programs](http://www.hud.gov/offices/cpd/communitydevelopment/programs).

#### **Energy Efficient Mortgage Program (EEM):**

The Federal Housing Administration and the Department of Housing and Urban Development established the Energy Efficient Mortgage Program to encourage people to purchase greener homes and/or make environmentally friendly renovations to existing homes. Paying lower utility bills allows homeowners to allocate a large portion of their income to their mortgage. Homebuyers can also benefit from a larger tax deduction with the EEM program. Eligible persons must meet FHA income requirements and be able to make the monthly mortgage payments. The cost of the improvements that may be eligible for financing as part of the mortgage is either 5 percent of the property's value or \$4,000, whichever is greater. For more information, the website address is:

[www.hud.gov/offices/hsg/sfh/eem/energy-r.cfm](http://www.hud.gov/offices/hsg/sfh/eem/energy-r.cfm).

#### *Environmental Protection Agency:*

[www.epa.gov/greenbuilding](http://www.epa.gov/greenbuilding)

#### *U.S. Department of Energy:*

[www.energy.gov](http://www.energy.gov)

#### **2009 Recovery and Reinvestment Act and Weatherization Funding:**

The U.S. Department of Energy (DOE) Weatherization Assistance Program will distribute \$5 billion to the states under the American Recovery

and Reinvestment Act (ARRA) of 2009. The ARRA of 2009 increased the statewide average expenditure limit per home to \$6,500. The act also increased the eligibility criteria to include any household whose income is at or below 200% of the poverty level. However, states, U.S. territories, and Indian tribes that administer the program may also elect to use the LIHEAP eligibility criteria of 60% of the state median income. For more information, the website address is:

[http://apps1.eere.energy.gov/weatherization/recovery\\_act.cfm](http://apps1.eere.energy.gov/weatherization/recovery_act.cfm).

## National Organizations

### Energy and Environmental Building Alliance

This organization provides education and resources to transform the residential design, development, and construction industries to deliver profitably energy efficient and environmentally responsible buildings and communities. Resources offered by EEBA can be found at: [www.eeba.org](http://www.eeba.org).

### Enterprise Community Partners, Inc.: Green Communities

Green Communities is a five-year, \$555 million commitment by Enterprise Community Partners, Inc. to build more than 8,500 healthy, efficient homes for low-income people and make environmentally sustainable development the mainstream in the affordable housing industry. Green Communities provides funding and expertise to enable developers to build and rehabilitate homes that are healthier, more energy efficient, and better for the environment—without compromising affordability. Green Communities also assists state and local governments to ensure their housing and economic development policies are smart and sustainable. The website address is:

[www.enterprisecommunity.org/programs/green\\_communities](http://www.enterprisecommunity.org/programs/green_communities).

### Green Affordable Housing Coalition

The Green Affordable Housing Coalition is a coalition of San Francisco Bay Area public- and private-sector professionals committed to incorporating green building practices into the design, construction, operation, and

maintenance of affordable housing. Through education and outreach, the organization promotes the creation of buildings that are integrated to the site and region; use energy, water and materials wisely; minimize and recycle construction waste; create their own energy; are durable and easily maintained; promote good health for both construction workers and residents; and enhance housing affordability. The website address is: [www.frontierassoc.net/greenaffordablehousing/Index.shtml](http://www.frontierassoc.net/greenaffordablehousing/Index.shtml).

### The Home Depot Foundation

Through the Affordable Housing Built Responsibly grant program, The Home Depot Foundation administers millions of dollars in grants each year to nonprofit organizations whose missions align with the Foundation's interests in supporting the production and preservation of affordable, efficient and healthy housing. For more information, the website address is: [www.homedepotfoundation.org](http://www.homedepotfoundation.org).

### U.S. Green Building Council

The U.S. Green Building Council (USGBC) is a national nonprofit organization committed to a prosperous and sustainable future through cost-efficient and energy saving green buildings. With a community comprising 78 local affiliates, more than 20,000 member companies, and more than 100,000 Leadership in Energy and Environmental Design (LEED) Accredited Professionals, USGBC is the driving force in the industry. The USGBC leads a diverse constituency of builders and environmentalists, corporations and nonprofit organizations, elected officials and concerned citizens, and teachers and students. The USGBC operates various programs relevant to green building practices, including maintaining the LEED Green Building Rating System, providing top quality educational programs on green design, construction and operations for professionals from all sectors of the building industry, and operating the Emerging Green Builders program providing educational opportunities and resources to students and young professionals. The website address is: [www.usgbc.org](http://www.usgbc.org).

## Examples of Programs

**Portland, Oregon (pop. 529,121):** The Housing Authority of Portland (HAP) collaborated with public and private stakeholders to redevelop an isolated and distressed 82-acre public housing site. The new area, entitled "New Columbia," is a neighborhood built to improve economic opportunity, community livability, and environmental quality. The new development increased the number of housing units from 462 rentals to 854 rental and ownership units. Housing options range from low-income apartment rentals to market-rate single-family homes. Amenities in the new neighborhood include community college classrooms, a Boys and Girls Club, an elementary school, parks, and retail shops. Additionally, the site was designed to improve the environmental performance of the old development utilizing LEED certification, recaptured rainwater, and a green street system. Throughout the building process, the City created Sunday morning workshops so that local residents would be able to provide their own input into the project. The New Columbia project was awarded the National Award for Smart Growth from the United States EPA. Contact: Pamela Kambur, Community Relations Manager, (503) 802-8508.

**Alexandria, Virginia (pop. 128,283):** Through a public-private partnership, the City of Alexandria is using a donated parcel of land and monetary funds contributed by the developers to construct The Station at Potomac Yard, an innovative mixed-use building that will combine the City's first

new fire station in thirty years with retail space on the ground floor, and sixty-four apartments of affordable and workforce rental housing. The Station will be one of the first structures completed in Potomac Yard. Integrating high quality materials and a design evocative of Alexandria's historic civic and fire facilities, green building elements, open space immediately proximate to the fire station entrance, and noise attenuation technologies to mitigate impacts resulting from the co-location of diverse uses in a density building, this project is anticipated to become an iconic image for the entire Potomac Yard redevelopment. Contact: Helen S. McIlvaine, Deputy Director, (703) 838-4990.

**Kansas City, Missouri (pop. 441,545):** The Home Builders Association (HBA) of Greater Kansas City is bringing green to the mainstream with the NAHB National Green Building Program for all homebuilders and remodelers. The HBA has established a Build Green Council for industry professionals with an interest in sustainable building practices and providing consumers with new homes that help protect the environment. Build Green Kansas City is a chapter of the NAHB National Green Building Program using the NAHB Model Green Home Building Guidelines. Membership in the council is open to anyone with an interest in green building. Company membership for HBA members is just \$100 per year. In order to showcase the developments of the Build Green Program, the



city held a Green Fair where attendees were able to see the first two local homes certified as part of the NAHB National Green Building Program and visit with local experts on environmentally friendly building materials, energy resources, stewardship, lifestyle, transportation, food & plans, and more. Contact: Phil Perry, (816) 733-2235.

**San José, California (pop. 894,943):** In order to promote its green building policy the City of San José has taken a two-pronged approach. First, The City of San José encourages building owners, architects, developers, and contractors to incorporate meaningful sustainable building goals early in the building design process. By using the United States Green Building Council's Leadership in Energy and Environmental Design (LEED™) rating system to document sustainable building features, project teams can publicize their progress. As of July 1, 2002, all City of San José facilities are to be designed to meet the LEED Certified Rating. Additionally, the City is creating educational outreach programs in order to support green building endeavors. Examples of these programs are a water conservation display, a green building brochure, a green-it-yourself brochure for residents, and a mailing list. By creating programs for the City's own municipal buildings, as well as the private sector and individual citizens the community is creating successful green building initiatives. Contact: Environmental Services, (408) 535-8550.

**Mankato, Minnesota (pop. 35,586):** Originally built as university housing, the Cherry Ridge Apartments were redeveloped in to affordable housing in 1990. Financial restructuring will ensure that the building remains affordable, and green rehabilitation will extend the life of the building. The development consists of a single building with a three-story and five-story section that offers 34 one-bedroom units, 43 two-bedroom units, and six three-bedroom units. Cherry Ridge Apartments feature an array of green and sustainable improvements, including low flow showerheads, a continuous ventilation system for moisture control, energy star appliances and light fixtures, native landscaping, and high efficiency water heaters. The financial restructuring plan allocates 63 units (eight of which are designated supportive housing units) as low-income housing tax credit units and 20 units as market rate units. The eight supportive housing units will be affordable to families earning 30 percent of the area median income, with additional units available to families earning 50 percent of the area median income. Contact: Janne Flisand, Program Coordinator, (651) 221-1997.

**Cleveland, Ohio (pop. 405,014):** Cogswell Hall, originally built in 1912, offers a family-like home for adults with extremely low incomes with disabling conditions. In order to retrofit the building to be LEED certified, the Hall underwent a rehabilitation and expansion of an existing 30-unit housing facility. Two main factors led to the project integrating green design: first, reducing the future operating costs of the structure by increasing the efficiency of the systems and secondly, integrating green design helps the non-profit organization providing the program and services to be able to afford the facility. The facility includes a vegetable garden using composting of kitchen garbage, florescent lighting in many areas and recycling efforts by the kitchen, office, and housekeeping departments. In addition, the health and well being of the facility's residents and the impact of new construction on the community are of great concern. Green design creates a cleaner living environment for the people using Cogswell Hall as their home. And by rehabilitating the existing structure and using green

design, a positive impact on the neighborhood is assured. Contact: Diana Cyganovich, Executive Director, (216) 961-1568.

**Seattle, Washington (pop. 563,374):** The Seattle Housing Authority (SHA) worked closely with community members to rebuild High Point, a formerly crime-ridden and dilapidated 120-acre hilltop neighborhood into a mixed-use, mixed-income, and environmentally sensitive community. Using green building principles, High Point's more than 1,700 new units are expected to consume less water, electricity, and natural gas than the old community's 716 units. The project is the nation's first Energy-Star rated rental housing development with tankless heating systems and front loading washers and dryers. Approximately 10 percent of the rental units are Breath Easy homes, designed and built for asthma sufferers. Additionally, the neighborhood includes a natural drainage system so that water entering the local salmon stream from High Point is as clean as if it had percolated through a natural meadow. The new development also includes new parks, a public library, and health clinic. The redevelopment has increased low-income housing opportunities by 43 percent. The redevelopment of High Point was awarded a 2007 National Award for Smart Growth from the EPA. Contact: Tom Phillips, Senior Development Manager, (206) 615-3414.

**North Miami, Florida (pop. 40,786):** The City of North Miami adopted Green Housing Rehabilitation Guidelines, requiring that 100 percent of federal Community Development Block Grant (CDBG) and Home Ownership Opportunities Program (HOME) funds and Florida's State Housing Initiatives Program (SHIP) funds must be used for rehabilitation, redevelopment, and construction projects that contribute to the "greening" of the City. Specifically, the guidelines require that all funds spent in these programs be used in a sustainable manner to promote energy efficiency. The implementing cost is funded through CDBG, HOME, or SHIP at an investment cost of \$50,000 dollars for each home, with the ability to increase the amount by an additional \$10,000 dollars to support any and all increases to cost the project may sustain in the efforts of making it "green". The City estimates that the initiative has reduced gas emissions by approximately 613,500 pounds per year and has saved 423,000 kWh of electricity per year. The Green Housing Rehabilitation program was featured at the 2008 City Showcase in Orlando. Contact: Maxine Calloway, Director, Community Development, (305) 893-6511.

**Poway, California (pop. 48,044):** Through a partnership with local non-profit Community Housing Works, the City of Poway and Poway Redevelopment Agency pioneered the use of green and sustainable materials and created the first affordable apartment complex in the nation to be fully powered by the sun. Solara is Poway's fifth multi-family affordable housing development. The development is situated on a 2.5-acre site, which includes 56 rental apartment units, and a 2,100 square-foot community room equipped with a computer-learning center. Solara has received local, state and national recognition for establishing a new standard in sustainable design. This program was awarded a 2008 Helen Putnam Award for Housing Programs and Innovations by the California State Municipal League. Contact: Ashley Jones, Management Analyst, (858) 668-4554.

For more information on green affordable housing programs, contact Bonnie Mann at (202) 626-3125 or at [mann@nlc.org](mailto:mann@nlc.org).

