

Preserving Affordable Housing is Green



FACT SHEET: ENVIRONMENTAL BENEFITS OF AFFORDABLE HOUSING PRESERVATION

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Addressing climate change must include existing housing.

“From an environmental standpoint, if we really want to address climate change and water conservation, the bigger opportunity is in existing buildings.”¹

- There are 124 million existing housing units in the U.S.
- 50% of buildings that will be in use in America in 2030 have already been constructed.²
- Residential buildings in the U.S. account for 36% of total electricity consumption.³
- 20.5% of total carbon emissions in the U.S. are from residential energy use.⁴

Renovating an existing building consumes less energy than demolition and new construction.

“The greenest building is... one that is already built.”⁵

- Existing buildings have embodied energy: the energy required to derive, deliver, and install the raw materials it takes to construct a building.⁶
- It takes 65 years for a new energy efficient building to save the energy lost when demolishing an existing building.⁷
- Constructing and using buildings accounts for 40% of material resources consumed and generates 25% of solid waste.⁸
- “The benefits in energy use, raw materials conservation, and landfill savings of reusing existing buildings are like the benefits of recycling household garbage, now a widely accepted practice.”⁹

Existing housing is already located in developed areas near transportation and utility services. No new infrastructure development is required.

“Over the life of a building, more energy is consumed traveling to and from a building than is used by the building itself. So location in urban areas with good mass transit is critical to reducing environmental impact.”¹⁰

- Much of the federally assisted rental housing stock is located in neighborhoods with access to affordable transportation options: 100,000 HUD assisted units in 8 cities examined are within a half mile of existing or proposed rail stations.
- More than 75% of HUD assisted homes in Portland and Denver are within half a mile of rail stations or frequent service bus lines.¹¹



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Safeguarding Affordable Housing

Greening affordable housing during the renovation process creates healthier living environments, lowers operating costs, and saves taxpayer money.

- Americans spend \$160 billion each year to light, cool, and heat their homes.¹²
- Energy costs consume an increasing proportion of low-income families' budget. On average, families with incomes greater than 60% of the state median income spend 3% of their budget on energy costs, while lower income families spend 20% of their budget on household energy costs. This energy burden on low income families is up from 15% in 1998.¹³
- HUD spends approximately \$5 billion a year on utility bills for multifamily housing.¹⁴
- It takes only 5 to 7 years to repay the increase in green construction costs through long-term operational savings.¹⁵

Galen Terrace Apartments in Washington, D.C.

In acquiring and renovating an 82-unit Sec. 8 property, National Housing Trust/Enterprise incorporated many environmentally friendly improvements including low volatile organic compound paints and sealants, Energy Star appliances and lighting, solar reflective roofing material, double-paned windows, and water barrels to collect and reuse rain water. The property is the first affordable housing to meet D.C.'s new green building standards.



State and local governments are increasingly providing incentives for integrating green methods into the rehabilitation of existing affordable apartments. The National Housing Trust has prepared a guide to green building incentives relevant to affordable housing preservation in each state. The guide summarizes incentives in each state's Low Income Housing Tax Credit plan and other creative incentives including green installation grants, favorable loans, and other programs. The report can be used as a toolkit for affordable housing developers who are looking for financial resources for integrating green building principles in affordable housing rehabilitation. The guide also serves as a resource for state and local leaders looking for green building policy options and best practices. Visit www.nhtinc.org to download the guide.

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References

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³ Wendt, A., Wilson, A. *The Challenge of Existing Homes: Retrofitting for Dramatic Energy Savings*. Environmental Building News (July 2007).

⁴ Ibid

⁵ Elefante, C. *The Greenest Building Is... One That Is Already Built*. The Journal of the National Trust for Historic Preservation (Summer 2007)

⁶ Q&A with Jonathan Rose. NHT Newsletter (June 2007).

⁷ *Facts about Preservation & Sustainability*. National Trust for Historic Preservation.

⁸ Elefante, C. *Valuing What We Have*. Urban Land Green (Spring 2008).

⁹ McIlwain, J., McIlwain, K. *Out With the New and In With the Old*. Multifamily Trends (March/April 2007).

¹⁰ Jonathan Rose quoted in the New York Times article *Finding the Green in Building Renovation* (January 10, 2007).

¹¹ *Preserving Opportunities: Saving Affordable Housing Near Transit*. NHT and Reconnecting America (January 2008) www.nhtinc.org/documents/Saving_Housing_Near_Transit.pdf.

¹² HUD report. *Promoting Energy Efficiency at HUD in a Time of Change: Report to Congress* (2006).

¹³ *The Increasing Burden of Energy Costs on Low-Income Households*. American Gas Association (September 26, 2007).

¹⁴ *Green Affordable Housing: HUD Has Made Progress in Promoting Green Building, but Expanding Efforts Could Help Reduce Energy Costs and Benefit Tenants*. GAO. Report GAO-09-46 (October 7, 2008).

¹⁵ Transportation-HUD Appropriations 2008 Committee Report.