

Less Is More: Transforming Low-Income Communities Through Energy Efficiency



1 Hour – Continuing Education Units



Host

Brett Little
LFA, LEED APH, GHP
Executive Director
GreenHome Institute
Grand Rapids, MI
info@greenhomeinstitute.org
888 LEED APH ext 1



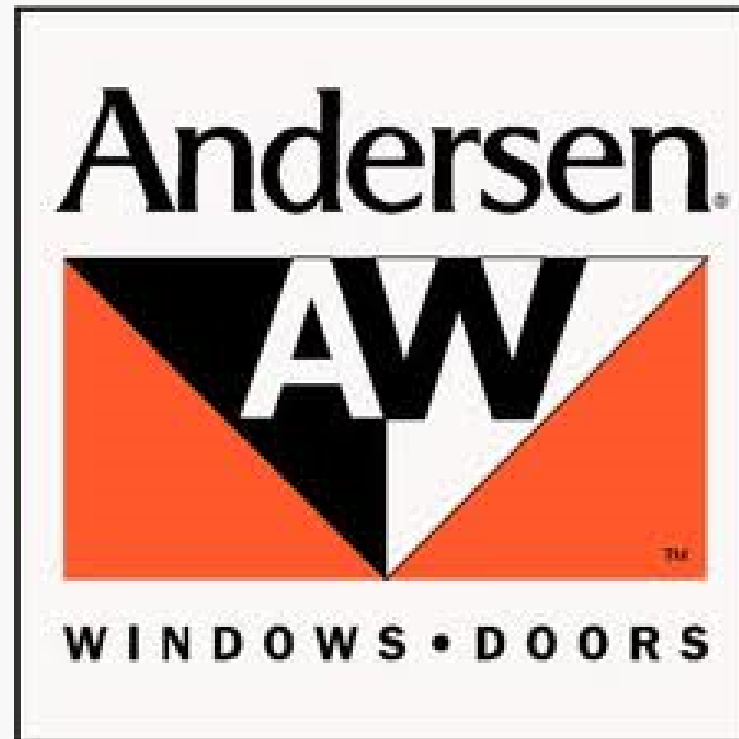
- Celebrating 15 Years!
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- 501(c)3 non-profit; mission:



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Enabling Low Income Energy Efficiency

Habitat for Humanity's 2015 Shelter Report

Brad Penney & Elisabeth Gehl

Presentation Overview

- Habitat's interest in residential energy efficiency
- Related problems of **energy & affordable housing** facing low-income Americans
- What can we do in the near term:
 - Enable EE Financing for “up front” costs
 - Promote on-bill financing & green banks
 - Build public & private Partnerships
 - Emphasize non-energy benefits of EE
 - Promote greater public awareness
 - Provide stronger support for existing federal programs

Habitat and Energy Efficiency

- Habitat is committed to energy efficient practices that will lower energy costs, increase health and safety measures, and reduce homes' monthly and life cycle costs.
- Many Habitat affiliates build to energy efficient standards as high as Leed Platinum and are leading the way in residential energy efficiency in housing markets across the country.
- HFHI secured a \$3 million Department of Energy Weatherization Innovation Pilot Program Grant (WIPP) in 2011 to retrofit homes nationwide.
- Federal weatherization advocacy: Weatherization Enhancement, and Local Energy Efficiency Investment and Accountability Act
- Residential energy efficiency research: 2015 Shelter Report

Energy Burden Faced by Low Income Americans

- Residential energy use is almost 25% of total energy consumption in U.S., according to ACEEE
- Americans spend \$230B annually on home energy
- Low income households spend between 17% and in some cases 50% of their disposable income to heat and cool their homes
- Middle class Americans spend about 4% to 5% for home energy
- Existing programs like WAP reach only a small % of eligible clients
- 7.4 million homes Weatherized; more than 30 million additional homes are eligible.

Combined Energy and Housing Low Income Burden

- 18 million Americans (renters and homeowners) pay more than 50% of their annual incomes for housing;
- Only 1 in 4 eligible families receive housing assistance (24% of 19 million families). Source: Urban Institute
- A family with one full-time worker earning the minimum wage cannot afford the local fair market rent for a two bedroom apartment anywhere in the U.S. Source: www.HUD.Gov
- Severely burdened households spend 70% less on healthcare and 40% less on food: Harvard Joint Center for Housing Studies

What Can Be Done on the Energy Side?

The barrier facing low income Americans is the lack of available financing for energy upgrades that would reduce the disproportionate burden.

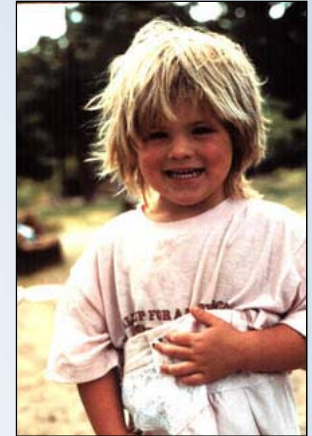


Available Options for Financing

- On bill financing (or on bill payment)
- State revolving funds for “up front” funding;
- Key is for payback on upgrades plus regular bill to be less for consumer than regular energy bill;
- Social Impact Bonds;
- Green leases;
- Energy service agreements and ESCOs;
- Residential PACE

What Is Needed for EE Financing?

Work with the electric and gas utilities (\$8 billion annually on state ratepayer funded EE programs)



Locate a source of up front capital

Support State Revolving Funds

Involve Third Party Lenders



Role of Green Banks

Leveraging Public Funds for low-cost, long term financing

- Stimulate demand by covering 100% of the upfront costs with a mixture of public and private financing;
- Leverage public funds by attracting much greater private investment to clean energy and efficiency markets;
- Recycle public capital so as to expand green investment;
- Reduce market inefficiencies; and
- Scale out clean energy solutions as fast as possible, maximizing clean electricity and efficiency gains per state dollar.

Residential PACE



- Property owners across the US are using PACE because it saves them money and makes their buildings more valuable.
- PACE pays for 100% of a project's costs and is repaid for up to 20 years with an assessment added to the property's tax bill.
- PACE financing stays with the building upon sale and is easy to share with tenants.
- State and local governments sponsor PACE financing to create jobs, promote economic development, and protect the environment.

Where is EE most needed

- Manufactured Housing; Multi-Family; Low Income Subsidized Housing are most urgent needs.



Manufactured Housing

- 7% of housing in the U.S.; largely in low income rural areas; 17 million residents of mobile homes;
- Most energy *inefficient* housing;
- Median annual income for residents is \$30K;
- No HUD standards before 1976; health and safety issues; 2 million mobile homes are pre 1976;
- Residents spend more than twice as much on energy per square foot of living space compared to occupants of site-built homes.

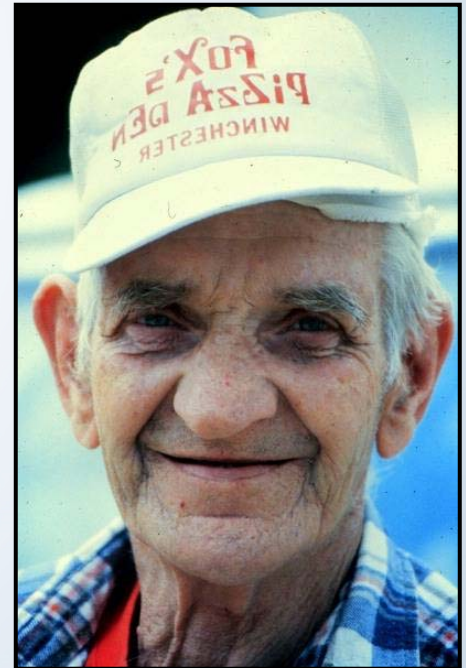
Multi-Family Housing Stock

- 30% of U.S. population lives in multi-family housing, which tend to be older properties;
- Greater challenge of overcoming split incentives;
- Studies show that 3.4B in annual utility bills could be saved with multifamily upgrades.



Low Income Subsidized Housing

- 5% of Americans live in subsidized housing;
- Unmet opportunities for energy efficiency;
- Increasing use of energy service or ESCOs;
Energy Savings Performance Contracts;
- The ESCO designs, installs, and maintains the EE solutions;
- Energy savings are used to pay back the cost of the ESCO over a 5 to 15 year period.





Raising Awareness

- Many people are unaware of existing programs;
- Wary of getting involved with government agencies; and
- Unwilling to take on the paperwork burden
- Need for public education and awareness campaign targeting low income households
- Need for a national campaign on the “*Energy Efficiency Works*” theme.

Stronger Support For Existing Programs

- Stringent federal budget
- FY 2016 Budget uncertain; currently operating on a CR
- “*Louder*” support needed for WAP, SEP, LIHEAP & HUD/HOPE VI programs
- Build coalitions between EE and Affordable Housing groups
- Low Income Housing Tax Credits
- Better organized advocacy to bring “success stories” to the Hill
- Build more champions on the Hill like Senators Reed, Collins, Shaheen and Coons and Congressman Tonko and Congressman McKinley

Non-Energy Benefits of EE

- Health and safety; Healthy Homes Initiative
- Higher property valuation and tax revenues
- Community revitalization
- Program evaluation only measures costs versus reduction in energy bills; undervalues energy efficiency investment
- Reducing air infiltration and carbon footprint
- Rely on Public/Private Partnerships: Baltimore example

Developments at Federal Level

- Congressional gridlock continues
- Comprehensive energy bills pending in House & Senate
- Obama is using Executive Authority to issue appliance and equipment standards

EPA Clean Power Plan

- Nationwide standards for carbon emissions from power plants; standards are “phased in” gradually to 2030
- EE will play major role in meeting state targets
- States have flexibility to develop and implement their own plans due to EPA in September 2016 but two year extensions can be requested; emissions trading is allowed
- Clean Energy Incentive Program is great opportunity for EE in low income communities; priority for early investment
- Double carbon credits for early investment in low income EE.

Thanks for listening!

For any questions, please contact:
Brad Penney at bpenney50@gmail.com
Elisabeth Gehl at egehl@habitat.org



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