

# Transformational Changes to Affordable Housing

## EPA Webinar for Local Governments on Energy Efficiency

April 21, 2009



## A New Foundation for Sustainability

- New Focus on Existing Housing
- New Pathways to Green
- New Emphasis on "Community Based" Strategies
- Linkage to Climate Change







## **Programs**



## Housing Market and Community Stabilization

- Neighborhood Stabilization Program
  - \$2 billion Competitive Funding
  - Energy Factors
  - Partnerships
- FHA Energy Efficiency Mortgage
  - Limit Increases
- Tax Credit Assistance Program
  - Competitive grants to Tax Credit projects
- Grants in Lieu of LIHTC



## **Energy Tax Incentives**

- Qualified Energy Conservation Bonds
  - Limit Increase
  - Green Communities Programs
- Tax Credit Caps for Energy Efficiency and Renewable Systems
  - 30% of system costs (Renewable)
  - \$1,500 on qualified measures
- Elimination of Basis Adjustment for Properties Receiving Subsidized Energy Financing



## **Affordable Housing**

- PHA Capital Fund
  - \$1 billion Competition
  - Energy Retrofit and other priorities
- Assisted Housing Stability and Energy and Green Retrofit
  - \$250 million (Loans and Grants)



## Low Income Energy Efficiency

- DOE Weatherization Assistance Program
  - \$ 5 billion
- Income Eligibility 200% of poverty rate
- Funding Levels -
  - Up to \$6,500/unit (Energy Measures)
  - Up to 20% on training and TA
- Implementation -
  - State Agency/ Local Agency Providers



## **New Community Foundations**

- DOE Energy Efficiency Block Grant
  - \$3.2 billion
- Eligible Activities
  - 14 activity categories
- Energy Efficiency Conservation
   Strategy
  - Multi sector; Staged Disbursement;
     \$250,000 for strategy







## Resources



## **Energy Efficient Green Building**

- Standards and Guides:
  - ENERGY STAR Builder Options Packages
  - Enterprise Green Communities www.greencommunitiesonline.org
  - Build It Green www.builditgreen.org
  - Climate Change ?





## Measures Anyone?

#### **Multifamily Rehabilitation**

(in addition to measures for Existing Multifamily Housing)

Measure	Comment	Annual Savings	Simple Payback (Years)
Lighting			
<ul> <li>T-8 or T5 lamps with electronic ballasts</li> </ul>	Electronic Ballasts use 30% less energy,	\$10-\$45	1.5 - 7
Metal Halide, High and Low Pressure     Sodium Exterior Lamps	provide better light quality, run cooler and last longer	\$50	1.4 - 2.8
Lighting Control Systems: Occupancy     Sensors, Time clock, Photocell	Required for new construction where inefficient lighting is used	\$12	3.0-4.7
Domestic Hot Water			
High Efficiency Water Heating System	Gas 40 Gal = 0.61 Electric 40 Gal = 0.93 Gas 60 Gal = 0.57 Electric 50 Gal = 0.92 Gas 80 Gal = 0.53 Electric 80 Gal = 0.89	\$30	13
HVAC			
Heating Systems	For Cold Climates: ENERGY STAR qualified gas furnace (90 AFUE); OR ENERGY STAR qualified heat pump; OR ENERGY STAR qualified boiler (85 AFUE); OR ENERGY STAR qualified oil furnace (85 AFUE)		
Air Conditioning Systems	For Hot Climates: ENERGY STAR qualified A/C (14 SEER / 11.5 EER); ENERGY STAR qualified heat pump (14 SEER / 11.5 EER / 8.2 HSPF)	\$18-\$20	8.0 -10
<ul> <li>Seal Duct System (located outside the conditioned space)</li> </ul>	<ul> <li>Limit CFM duct leakage to 12% or less of the square footage served by the system (e.g., 1,000 Sq. ft. unit x 12% = 120 CFM allowable leakage)</li> <li>Insulate ducts to a minimum of R-6.</li> </ul>	5%-20%	1.0-3.0
Additional Appliances			
ENERGY STAR Dish Washers		\$15	< 1
Shell Sealing			
Insulation	Add insulation where needed and feasible to levels prescribed by IECC	\$6-\$8	18-20
ENERGY STAR Windows	Savings vary depending on area heating and cooling loads	\$125-\$360	5.0-7.0



## **Energy Rehab Advisor**

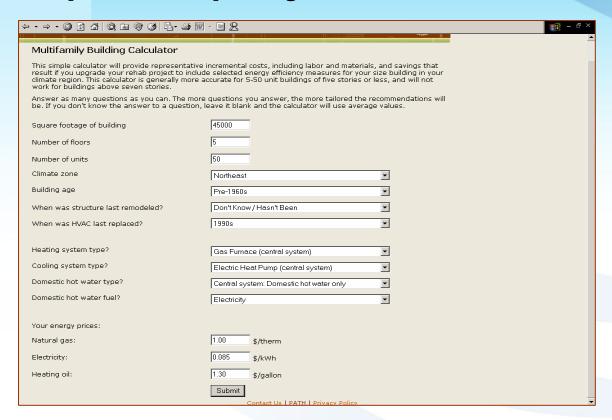


www.rehabadvisor.net



## **Energy Rehab Advisor**

#### Input: Property Characteristics

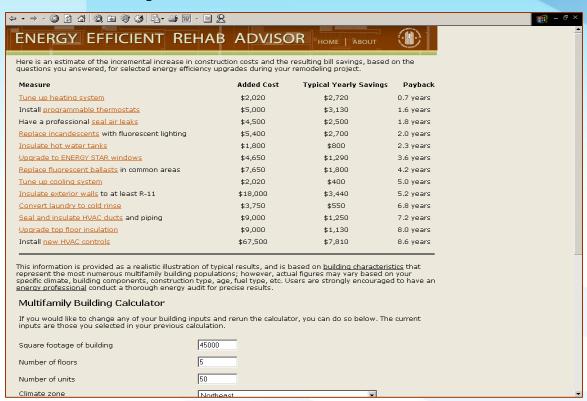


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## **Energy Rehab Advisor**

**Output: List of Measures** 



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## **Energy Efficient Green Building**

- Financing Tools & Initiatives:
  - Program Preferences and Threshold Requirements (LIHTC, HOME...)
  - FHA Mortgage Programs/ENERGY STAR Mtg
  - Energy Performance Contracting (PHAs, Local Govt)
  - Emerging Local Government Models (AB 811)
- Leveraging:
  - Utility Programs (Local Government Partnerships, Incentives, Low Income)



## **Energy Efficient Green Building**

- Procurement:
  - Energy Star Purchasing: www.quantityquotes.net
  - Specifications:
    - (1) Proper Installation per Mfg specifications
    - (2) Inspection
    - (3) Testing and Verification
- Contractors:
  - Licensed and Certified
  - ENERGY STAR Home Performance BPI Certified



### **ENERGY STAR Bulk Purchasing**



www.quantityquotes.net



### WEB SITE RECAP

- HUD Recover Act: www.hud.gov/recovery
- Weatherization: www.waptac.org
- Energy Efficiency Block Grant: www.eecbg.energy.gov





## Wayne Waite, Regional Energy Manager

U.S. Department of Housing and Urban Development 775-824-3707 wayne.w.waite@hud.gov