

# Green Financing with ENERGY STAR



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# Green Starts with Blue



- A green home is an energy efficient home
- An energy efficient home reduces air pollution generated by power plants
- The blue ENERGY STAR label makes it easy to recognize an energy efficient home

A blue rectangular label template for an ENERGY STAR qualified home. The top left corner features the ENERGY STAR logo. To its right, the text "AN ENERGY STAR® QUALIFIED HOME" is displayed. Below the logo and text, there are four white input fields for "Address:", "Built by:", "Verified by:", and "Date:". A larger white input field for "Optional information:" is located below the "Date:" field. At the bottom of the label, there is a paragraph of text explaining the verification process and a link to the website "www.energystar.gov".

Address:

Built by:

Verified by:

Date:

Optional information:

This home has been independently verified through an EPA-approved sampling protocol to meet ENERGY STAR's strict guidelines for energy efficiency. Each ENERGY STAR qualified home can keep 4,500 lbs of greenhouse gases out of our air each year.

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

# ENERGY STAR's Goals



- Educate affordable housing stakeholders about the importance of energy efficient affordable housing.
- Explain how the ENERGY STAR program can help stakeholders meet their energy efficiency goals
- Help affordable housing stakeholders (HFAs, lenders, PHAs, building owners, developers) incorporate ENERGY STAR-related measures into their housing programs, policies, and decision-making processes.

# Why is energy efficiency important?



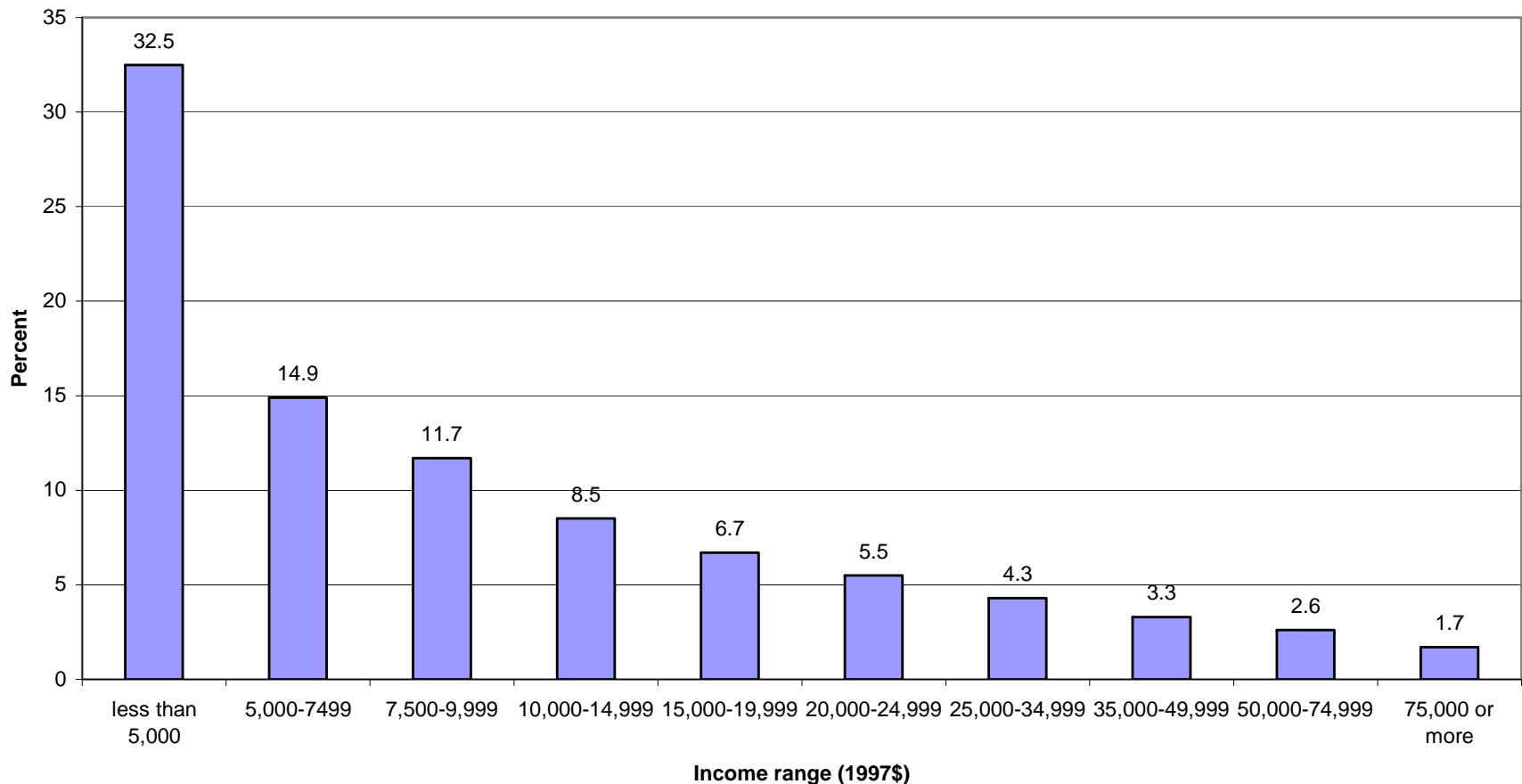
- Rising energy prices
- Low-income households spend more on energy (can exceed 30% of income)
- Grant funding and subsidies are shrinking
  - Energy bills exceed LIHEAP funding by \$21 bil.
- Utility costs in public and assisted housing are more than a quarter of operating costs

# Why is energy efficiency important?



## Energy Burden Highest on Low-Income Households

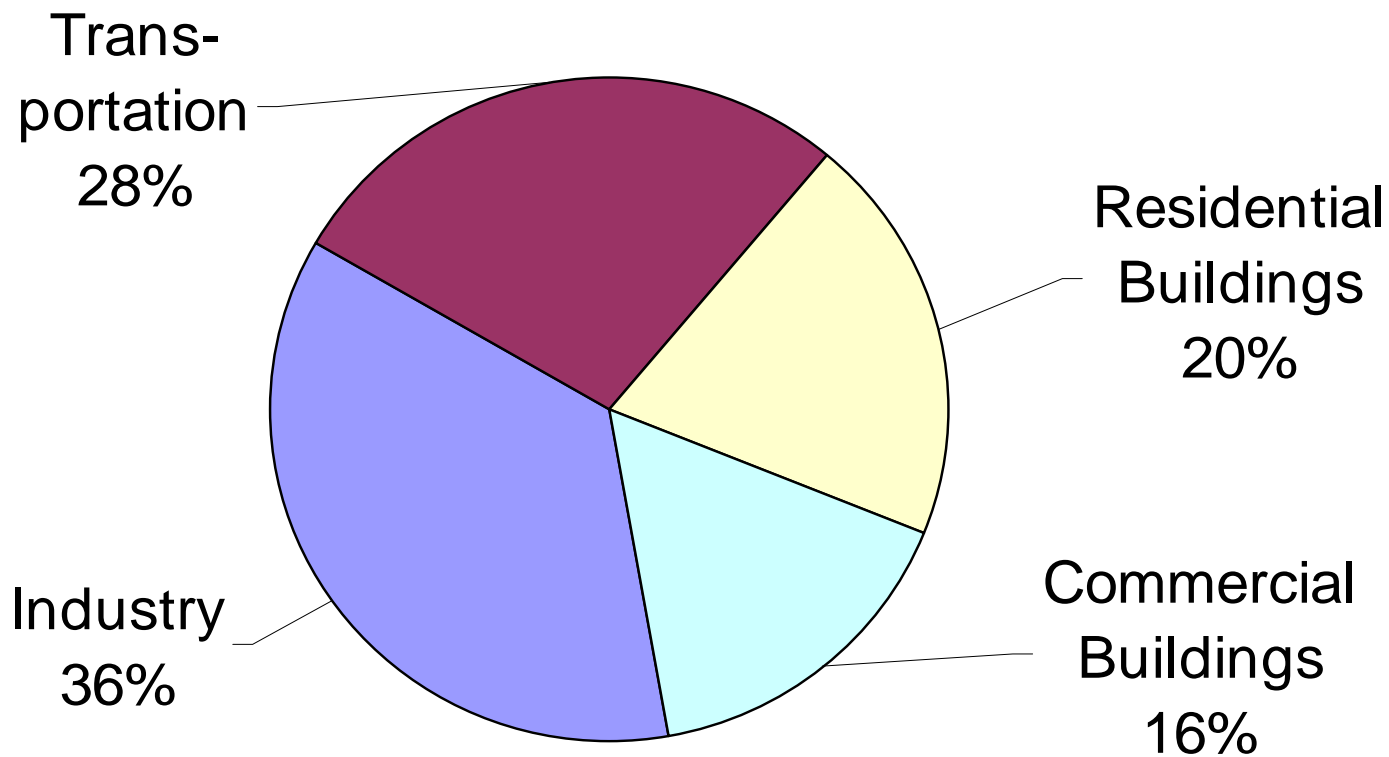
Percent of income for energy expenditure 1997



# Why is energy efficiency important?



**Buildings account for over one third (36%) of all energy used in the U.S.**



# How Energy is Wasted in Buildings



- Old and poorly maintained HVAC systems
- Inefficient and old lighting and appliances
- Structural damage, leaks, and decay
- Insufficient and poorly installed insulation
- Leaky and poorly installed ducts
- Inefficient and/or leaky windows & doors
- Lack of homeowner awareness = wasteful habits

# ENERGY STAR®



- National brand representing energy, financial & environmental performance



- Over 40 product categories covering appliances, residential lighting, consumer electronics & office equipment



- Certification of top energy performance for homes & buildings



Products that earn the ENERGY STAR® prevent greenhouse gas emissions by meeting strict energy efficiency guidelines set by the U.S. Environmental Protection Agency and the U.S. Department of Energy. [www.energystar.gov](http://www.energystar.gov)



CHANGE FOR THE BETTER WITH ENERGY STAR

# ENERGY STAR Solutions for Affordable Housing



## New Housing:

- Specify ENERGY STAR equipment and appliances
- Specify homes/units meet ENERGY STAR construction guidelines

## Existing Housing:

- Specify ENERGY STAR equipment and appliances
- Implement Home Performance w/ENERGY STAR or perform whole house energy improvements

# ENERGY STAR

## Product Savings



- **Refrigerators** - At least 15% more efficient than the minimum federal efficiency standard.
- **Clothes Washers** -- Compared to a model manufactured before 1994, an ENERGY STAR qualified clothes washer can save up to \$110 per year on your utility bills.
- **Dishwashers** - Use a minimum of 25% less energy than the federal minimum standard for energy consumption.
- **Compact Fluorescent Lights (CFLs)** - Use 2/3 less energy than a standard incandescent bulb and last 6-10 times longer.
- **Furnaces** - Offer a rating of 90% AFUE or greater, which is about 15% more efficient than the minimum federal efficiency standard.

# What is an ENERGY STAR Qualified Home?

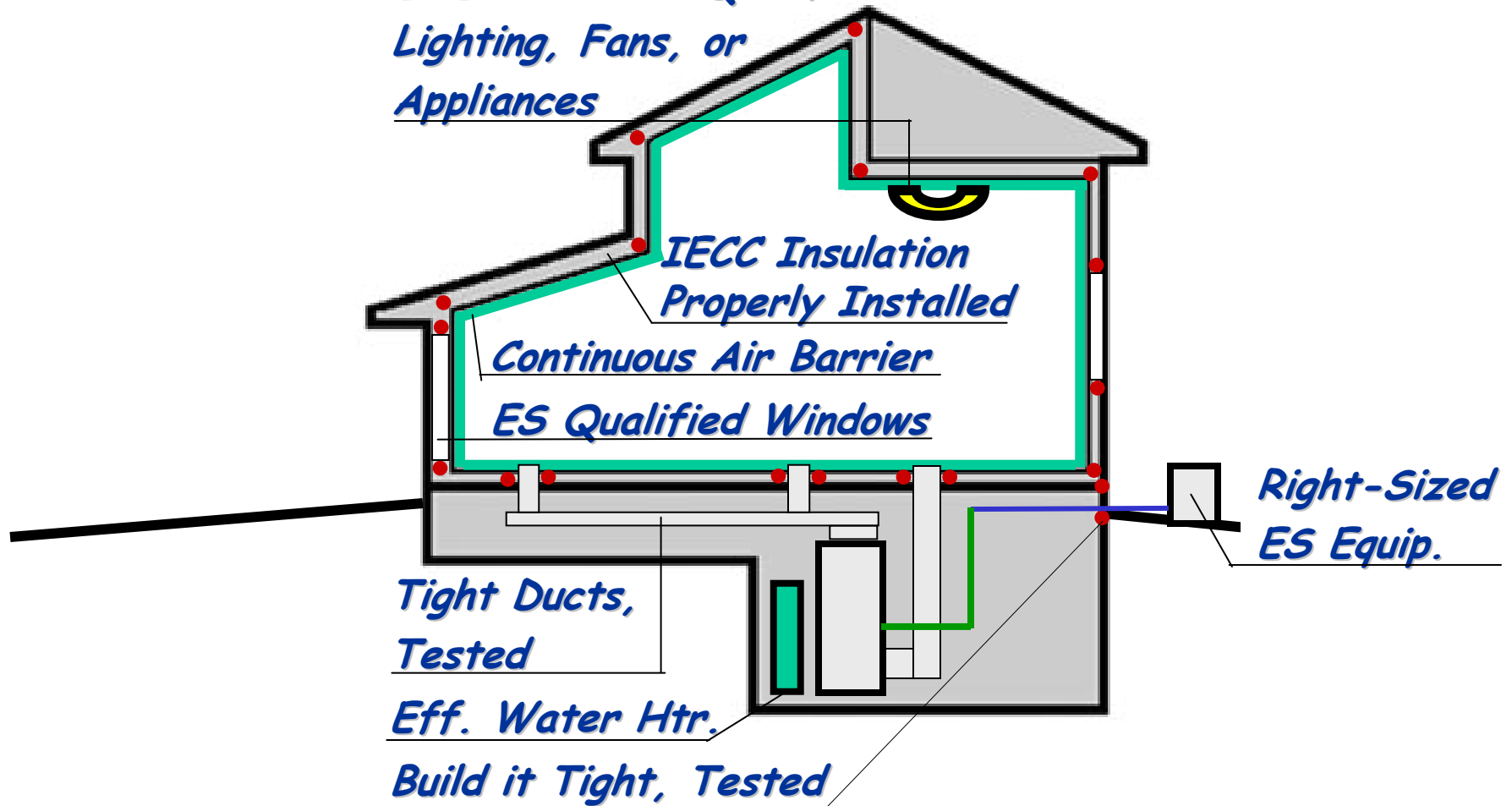


- Minimizes energy needed to control the interior environment while maximizing comfort
- **15-20%** more energy efficient than a standard *new home*
- Passes third party inspection by a certified home energy rater
- Can remove 4,500 lbs. of greenhouse gases per year
- Can save homeowners \$200-400 per year

# ENERGY STAR Qualified Home



*ENERGY STAR Qualified  
Lighting, Fans, or  
Appliances*



*IECC Insulation  
Properly Installed*

*Continuous Air Barrier*

*ES Qualified Windows*

*Tight Ducts,  
Tested*

*Eff. Water Htr.*

*Build it Tight, Tested*

*Right-Sized  
ES Equip.*

# For Existing Homes



- Home Performance with ENERGY STAR
  - *'Whole-House' improvements*  
*EPA works with state and utility partners*
  - *Combines Audit, Evaluation, Improvements*  
*Emphasis on delivering improvements*
  - *Quality Assurance*  
*Diagnostics and "best practice" installation*  
*Accredited performance contractors*
- Currently available in AZ, CA, CO, GA, ID, IL, MA, NJ, NY, OR, RI, TX, VT, WI, WY

# Why Finance ENERGY STAR?



- Lower energy use saves money
  - for housing authorities (less overhead) or
  - for low-income residents (lower bills)
- Improved home comfort
- Improved building durability
- Increased property value
- Reduced air pollution / improved environment

# How to Finance ENERGY STAR Measures



- Award points and/or incentives for ENERGY STAR measures as part of criteria for public funding
- Provide incentives that promote ENERGY STAR measures over standard efficiency equipment
- If buying a home, ask lender about energy efficient mortgages - includes energy savings in loan amount
- Energy Performance Contracts - energy savings used to pay for improvements made by energy service companies

# Web Links



RESNET - HERS Raters

[www.natresnet.org](http://www.natresnet.org)

ENERGY STAR for New Construction

[www.energystar.gov/homes](http://www.energystar.gov/homes)

ENERGY STAR Home Improvement

[www.energystar.gov/homeimprovement](http://www.energystar.gov/homeimprovement)

ENERGY STAR Bulk Purchasing Tool

[www.bulkpurchase.net](http://www.bulkpurchase.net)

Building Performance Institute

[www.bpi.org](http://www.bpi.org)

State, Local, Utility, and Federal Incentives

[www.dsireusa.org](http://www.dsireusa.org)

# Summary



Energy efficiency is not a luxury, it is critical to providing truly affordable housing and more sustainable communities.