

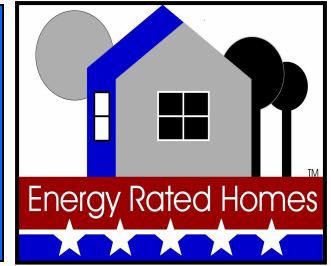


TAX CREDITS FOR HIGH PERFORMANCE HOMES

by Barbara Collins
Energy Rated Homes

Affordable Housing Market
& the Other Federal Tax Credit

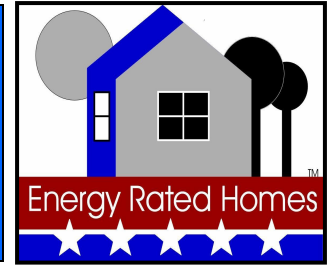
Intro to Affordable Housing Sector



“Things are more like they are now than they have ever been.”

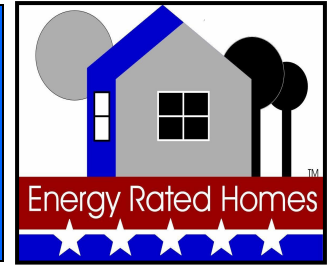
- Gerald Ford

Pieces in the Puzzle



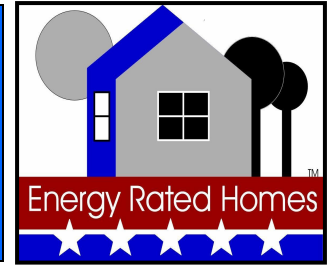
- HUD – Federal Affordable Housing Agency
- Housing Authorities – State Agencies
 - Tax Credits, Bonding Authority, Weatherization
- Local Entities
 - PHAs, HOME Rehab, New Construction

HUD Spends \$4 Billion Each Year on Utilities



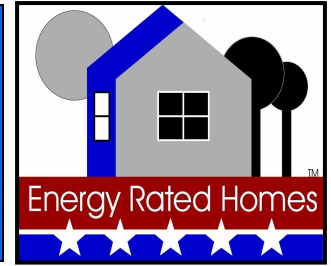
- More than 10% of entire budget
- Estimated \$1.1 billion directly through public housing operating subsidies
- Approximately 5 million units nation-wide
- Utility bills = 27% of annual operating budgets of PHAs

NEVADA Affordable Housing Agency



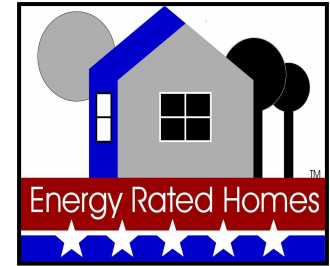
- Must achieve all ENERGY STAR Home requirements
- TBI Checklist
- Duct leakage
- Manual J Load Calcs
- Return Air Balancing units of 2 BR or more

Energy Star Qualified Lights & Appliances



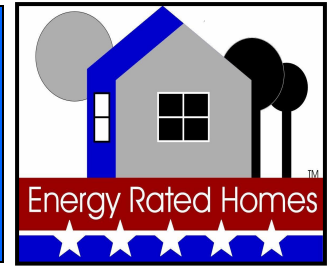
- Ceiling Fans
- Light Fixtures – CFLs allowed
- Refrigerators
- Dishwashers
- Clothes Washers

Lights & Appliances



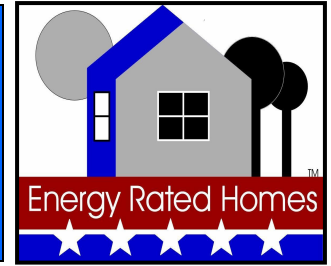
- **Compact Fluorescent Lights (CFLs)** –Less energy plus cooling load reduction
- **Dishwashers** - Use a minimum of 25% less energy than the federal minimum standard for energy consumption.
- **Clothes Washers** -- Compared to a model manufactured before 1994, an ENERGY STAR qualified clothes washer can save up to \$110 per year on your utility bills.
- **Refrigerators** – At least 15% more efficient than the minimum federal efficiency standard.

IAQ



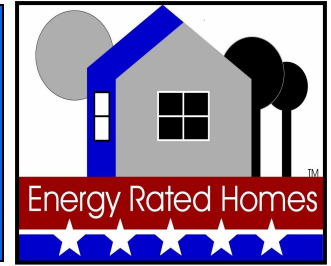
- Combustion Appliances inside conditioned space - Power vented or direct-power vented unit.
- Fresh Air Ventilation

Hot Water Conservation



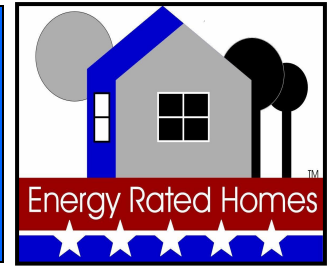
- Showerheads - Use \leq 2.5 gallons per minute
- Faucets - Use \leq 2.0 gallons per minute

Design Review & Assistance



- Plans Analysis for Energy Star
- Design Review for other requirements
- Help Desk for architects, mechanical engineers, etc. Answers questions about requirements and provides technical assistance
- Annual seminar for development teams

Silver Sage Senior Residence



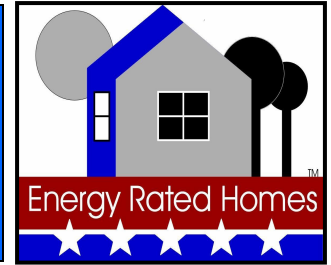
Low Income Tax Credits
1 Building - 41 Units



- Low Income Tax Credit Project
- High Performance Windows
- Ducts and AHU in conditioned space
- Energy Star Appliances

\$6,767/Yr Energy Cost Savings
86,556 Lbs/Yr CO2 Avoided

Pacific Pines



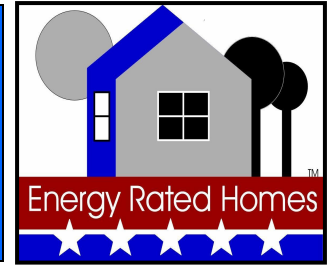
Low Income Tax Credit project
2 Buildings 102 Units

- Demand Water Heaters
- High Performance Windows
- Ducts and AHU in conditioned space

\$13,210/Yr Energy
Cost Savings

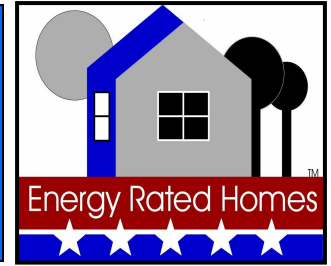
94,381 Lbs/Yr CO₂
Avoided

Tax Credit Units



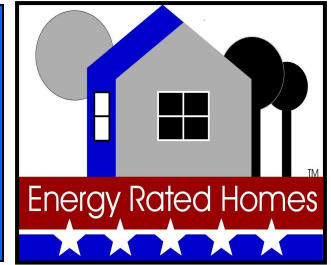
- 2007 - 503 New Construction Units completed
- 2008 - 721 Units New and Rehab in pipeline

ARIZONA Omnibus Energy Bill



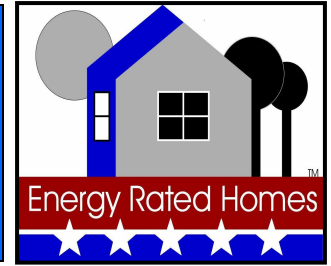
- Requires all MF Construction funded by the Affordable Housing Agency to meet E Star Homes level
- Have no room pressures greater than + or – 3 Pa relative to outside in any zone of the house.

HUD Initiative



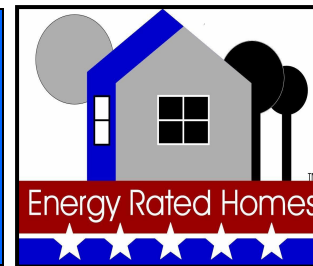
- M2M Green Initiative Pilot Program
- Launched in San Francisco July 2007
- 1st time HUD has required a Green Audit in Conjunction with a PCA

HUD Audit Requirement



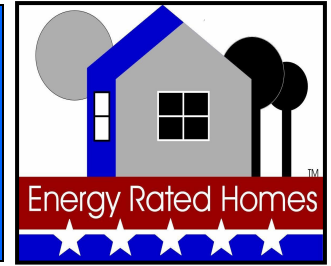
- PHA's must have an Energy Audit of all properties every 5 years
- Not specific and not enforced
- Under review to make more effective

What is Affordable Housing?



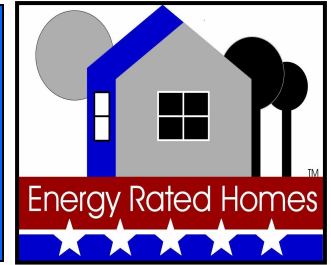
The Definition of Housing Affordability
= 30 % or less of monthly income is spent on
housing.

Crisis in Affordable Market



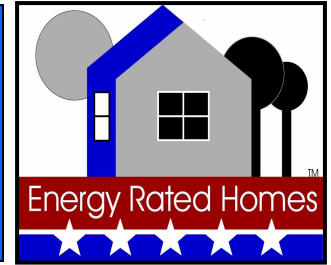
- 12 million American households pay more than 50 percent of their annual incomes for housing.
- A family with a full-time worker earning the minimum wage can't afford the local fair-market rent for a 2 bedroom apartment anywhere in the United States.

Alliance to Save Energy



- 25% reduction in energy costs in housing units nationwide would make 1,182,000 more housing units “affordable”
- Affordable = 30% household income for housing costs Rent + Utilities

Picking Up the Pace



***“The future will be better
tomorrow”***

Dan Quayle