

## ENERGY STAR 2010 Awards for Affordable Housing

EPA has made its final selections for 2010 national and regional ENERGY STAR Excellence in Affordable Housing Awards following review and recommendations by HUD Regional energy and environmental staff and EPA field managers. These awards recognize the leading edge for installing energy efficiency, and increasingly green and sustainable features, in affordable housing for low income families. Their activities also include homeownership training in maintenance. There are five national winners and twelve regional winners. Habitat for Humanity is recognized six times. Two local public housing agencies and two state agencies are included. The following summaries are from texts prepared by the awardees and reviewers.

### National Awards

Topeka Department of Housing and Neighborhood Development; Community Housing Partners, Christianburg, VA; Houston Habitat for Humanity; PK Management, LLC Richmond Heights OH.

Nashville Area Habitat for Humanity received a "Sustained Excellence" award as they've won a national award the past two years.

### Regional Awards

EarthCraft Virginia; Habitat for Humanity Denver; Habitat for Humanity Greater Stark & Carroll Counties OH; Housing Authority of Los Angeles; Iowa Dept. of Economic Development; Jamboree Housing Corp, Irvine CA; Louisville Metro Housing Authority; Milford DE Housing Development Corp; Missouri Housing Development Commission; Otero County NM Habitat; St. Johns Housing Partnership, St. Augustine FL; TriState Habitat for Humanity, Cincinnati OH.

### Further Information

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1. Nashville Area Habitat for Humanity (Sustained Excellence Award)

Information: Leah Smith Relations Director [lsmith@habitatnashville.org](mailto:lsmith@habitatnashville.org)

Since 1985, NAHH has constructed 426 homes in Davidson and Dickson County for over 1,400 family members, including more than 900 children. Partnering with ENERGY STAR in 2006, Nashville Area Habitat consecutively constructed 147 homes that have followed ENERGY STAR residential guidelines and have been certified by an independent third-party inspector to be ENERGY STAR compliant. Our homeowners collectively yield annual savings of \$123,480, or about \$840 per family on their utility bills. Our partner families reduce energy consumption by 42% and save 611,373 kilograms of CO2 each year.

In the effort to utilize ENERGY STAR products and residential energy efficiency guidelines, we have implemented the following institutional changes. We are able to more competitively pursue local and national funding opportunities from Housing and Urban Development (HUD) and local housing agencies, such as Metropolitan Development and Housing Agency (MDHA). We are more selective in partnering with vendors that offer ENERGY STAR products, materials and components. Our HomeWORKS homeownership education program teaches four classes which incorporate ENERGY STAR information: 1) Dr. Seuss - You Can Be an ENERGY STAR, 2) Home Maintenance Cost, 3) Maintaining Your Home, and 4) Sustainable Living.

The population served by Nashville Area Habitat is largely below the 50% HUD median income level, and families selected for the Habitat program must have stable employment, a need for adequate shelter, and a willingness to partner with Nashville Area Habitat. We leverage funding sources to pay for energy efficiency improvements through strategies like a partnership with Whirlpool Corporation and Habitat for Humanity International, and participation in our local utility, Nashville Electric Service and the Tennessee Valley Authority energy efficiency rebate programs and individual house sponsorships.

2. TOPEKA (National Award)

Information: Warren Woodruff, Supervisor [wwoodruff@topeka.org](mailto:wwoodruff@topeka.org)

The City of Topeka Department of Housing and Neighborhood Development (HND) reaffirmed its leadership position as an ENERGY STAR Partner in 2009 by continuing its commitment to providing affordable housing to low income families and promoting the ENERGY STAR label. Building on the successful ENERGY STAR Program in 2007 and 2008 when four and eleven ENERGY STAR affordable housing units were constructed, we are excited to announce that Topeka has seen the construction of twenty-three ENERGY STAR Affordable Housing Units for low income families in 2009.

Some sustainable features of these units include the use of soy-based foam insulation and cellulose blow-in insulation. Topeka expanded its ENERGY STAR promotional efforts through the use of the City's TV-4 cable station with access to approximately 60,000 households. The City broadcast two ENERGY STAR videos created by staff and the Mayor declared the month of October as ENERGY STAR Awareness Month. TV-4 was also used to publicize Topeka's ENERGY STAR Awareness Expo which was held in October. New to this year's Expo were representatives from State programs that received Recovery Act Funds from the EPA, DOE, and HUD for energy and weatherization programs. These State agencies spoke to the public on accessing the new energy conservation programs.

The energy savings received through the use of ENERGY STAR continues to be confirmed by the unique comparability study which the City has conducted since 2007. This

study compares housing units that are identical in design other than the special ENERGY STAR requirements required for certification. The Energy Savings thus far has been 52% with a cost savings of 42%. The City of Topeka is a devoted and proud partner to the ENERGY STAR Program and is looking forward to the ways in which it can continue to contribute as a program partner.

3. Community Housing Partners Christiansburg VA (National Award)

Information: Susan Sisk VP Corporate Development [SSisk@chpc2.org](mailto:SSisk@chpc2.org)

Community Housing Partners is a non-profit community development corporation that has been serving the housing needs of persons of low wealth for the past 34 years. We own and manage over 5,100 units of energy efficient, affordable multifamily housing in 4 states. These homes are rented to individuals and families with incomes between 40-60% of their area's median income. We design, build and sell affordable, single family new homes that are EarthCraft certified and ENERGY STAR qualified. All of CHP's residents, homebuyers and renters, are given green operations manuals to learn how to take care of the energy efficiency features of their homes; how to save money on energy costs; and general education on how to reduce their own carbon footprint by living more efficiently and thoughtfully on the planet.

In 2009 alone, CHP weatherized 833 multifamily housing units at an average cost of \$10,000 per unit which was made possible through the availability of ARRA stimulus funds that were targeted to multifamily energy efficiency improvements. CHP also developed an additional 180 units of affordable housing that were built to EarthCraft standards. Our homes have ENERGY STAR appliances, windows, lighting fixtures and heating systems. Our insulation exceeds building code requirements and we seal our buildings' envelopes and duct systems. CHP is also the creator of the New River Center for Energy Research and Training and over the past year, our certified staffs have trained over 2,900 participants in energy conservation, energy auditing and weatherization practices across the United States. In June 2009, CHP purchased a training facility and is in the process of up-fitting the building to create a full service energy conservation training center to serve the weatherization network and building contractors who are interested in learning more about energy efficiency practices.

4. Houston Habitat for Humanity (National Award)

Information: Jerry Kovaly, Construction Director [jkovaly@houstonhabitat.org](mailto:jkovaly@houstonhabitat.org)

Houston Habitat for Humanity is an affordable home builder serving those 60% and below of the adjusted median income for Houston, TX. Houston Habitat develops land for new single family home communities. Our current project is a 126 home subdivision call Umland Park in south Houston. Each home that Houston Habitat builds is ENERGY STAR certified. We have built over 500 ENERGY STAR homes since 2003. Houston Habitat is the only affordable home builder in Houston building 100% ENERGY STAR homes. In 2009 we built and certified 84 homes with a savings of 62,955 kWh. This saved the Houston Habitat homeowners 45% on their electric bills. The average Houston Habitat home is 3 bedroom 1 bath averaging about 1000 square feet.

The home construction incorporates the best cost effective ENERGY STAR measures at all stages of construction from the planning to the completed home. The exterior walls have a total R rating of 19. The ceilings have R30 blown in insulation. All penetrations to the exterior are sealed. The roof decking is radiant barrier which prevents 90% of the radiant energy from entering the attic area. The homes have a 24" overhang. The windows are tinted low e, double pane. Houston Habitat uses a 15 SEER A/C unit with matched furnace. All duct openings are

sealed to the ceiling. The range and refrigerator, hot water heater, and ceiling fans are ENERGY STAR rated. Houston Habitat builds affordable homes by bringing together those with resources, such as funds, labor and material and our partner families to build simple decent homes.

The partner families put in 300 hours of sweat equity to qualify to buy their home. The partner families buy the homes with an interest free mortgage. This provides a mortgage payment of between \$500 and \$550 per month. This is less than monthly rentals in the Houston area. Houston Habitat is the mortgage holder and therefore has a 20 year relationship with our homeowners. Building an ENERGY STAR certified home helps our homeowner better afford their home.

#### 5. PK MANAGEMENT, LLC Richmond Heights OH (National Award)

Information: Joyce Walker, Director of Community Relations [jwalker@pkmanagement.com](mailto:jwalker@pkmanagement.com)

PK Management is a nationwide management company with a diverse portfolio specializing in Section 8 affordable housing properties and Low Income Housing Tax Credit properties. We have nearly one-hundred properties with close to 12,000 units spread over thirteen states that we're proud to say are part of individual energy efficiency plans. In 2009 we retrofitted 4,674 units using ENERGY STAR products. Upon purchasing each property, our initial goal is to retrofit the building to become energy efficient. Oftentimes we purchase older buildings that are designed whereby the green redevelopment project is uncomplicated due to good masonry and insulating qualities. Other times, we purchase buildings that require intense measures to transform them into sustainable energy efficient properties. The first thing we do upon purchasing a property is conduct a comprehensive energy audit that we use to develop a detailed energy reduction plan. Our energy reduction plans follow a business model and a social model because we get our tenants involved! Our plans include a timeframe to complete the following:

Install ENERGY STAR lighting in common areas; install ENERGY STAR labeled showerheads in apartments; install motion sensors and timers on outdoor lighting; install low-flow toilets; upgrade boilers/chillers as needed; seal plumbing stacks ;weather strip hatch doors to roofs, attics, outdoor spaces; install high-performance windows; install programmable thermostats in common areas ; replace old office equipment with ENERGY STAR labeled options; train new staff about our company's 'Go Green' plan; supply our residents with energy conservation tips via monthly newsletters; replace toxic cleaning products with green-cleaning products; develop recycling centers at each property; encourage residents to participate in Change a light, Change the World campaign.

Our quick attack to retrofit our buildings has led to successful cost-savings while benefiting the environment and residents.

#### 6. EARTHCRAFT Richmond VA (Regional Award)

Information: Sean Shanley, Director of Operations [sean.shanley@earthcraftvirginia.org](mailto:sean.shanley@earthcraftvirginia.org)

EarthCraft Virginia is a certification process for multifamily and single family residential housing that serves as a blueprint for healthy, comfortable homes that reduce utility bills and protect the environment. EarthCraft certified projects receive a dual certification: Energy Star Certification and EarthCraft House certification.

EarthCraft promotes diligent air sealing of the building envelope and its mechanical systems while still allowing for fresh air intake. Air sealing at little additional cost, provides a tighter building envelope and thus projects are more energy efficient and less costly to occupy. Less communication of air and sound between units, and better indoor air quality with managed fresh-air intakes creates a more durable project overall. Resource efficient materials such as concrete with fly ash, cellulose insulation, carpet pad and carpet containing recycled materials defer wastes from landfills. With window and insulation levels that meet or exceed code, resource conservation measures, and the use of ENERGY STAR appliances, utility bills remain low after occupancy. Not only is the EarthCraft House certification healthy for the environment, but it's healthy for the homeowners and their wallets.

In 2009, 343 affordable dwelling units and 48 affordable single family homes (35 of those are Habitat for Humanity) were ENERGY STAR and EarthCraft certified. This brings our affordable housing totals to 2,012 multifamily dwelling units and 104 single family houses.

#### 7. HABITAT FOR HUMANITY DENVER (Regional Award)

Information: Heather Lafferty, Executive Director [heather@habitatmetrodenver.org](mailto:heather@habitatmetrodenver.org)

Habitat for Humanity of Metro Denver (HFHMD) has been building high quality, energy efficient homes in partnership with low-income families for 30 years. To date, HFHMD has built 395 homes helping to provide 1,700 adults and children with permanent solutions to their housing needs. In 2009, HFHMD completed 28 new homes, housing 114 adults and children.

Habitat for Humanity of Metro Denver is a pioneer at incorporating affordable, green building practices into home design and construction. HFHMD has been testing its homes under ENERGY STAR standards for over a decade, and consistently tests at the 5-star level. ENERGY STAR products such as refrigerators, front-loading washers, and CFL bulbs are included in all new HFHMD homes. HFHMD also incorporates features like tankless water heaters, 90% efficient furnaces and low-flow toilets for additional utility savings.

E-Star reports show that when a HFHMD house is compared to a Denver code-built home, the HFHMD home saves 30-40% in heating and electric use. HFHMD has partnered with the National Renewable Energy Lab (NREL) to build special houses that were meant to test the limits of energy efficiency in affordable housing. In 2002, HFHMD and NREL built a house that received the highest E-Star rating given to any house in Colorado to that point.

In 2005, HFHMD and NREL designed a zero-energy house that produced as much energy as it consumed. In the first year of operation, the home produced 24% more energy than it consumed, 12% more in the second year. More recently, HFHMD built an award-winning 11-home solar panel community, and two Gold LEED certified homes which were completed in June, 2009. In January 2010, HFHMD kicked off construction for their largest green community in its history, a 24-townhome, TOD development in central Denver.

#### 8. HABITAT FOR HUMANITY OF GREATER STARK & CARROLL COUNTIES, OH (Regional Award)

Information: Beth Davidson, Development [bdavidson@habitatstark.org](mailto:bdavidson@habitatstark.org)

During 2009, Habitat for Humanity of Greater Stark & Carroll Counties built 13 single family affordable homes for low income families. The homes are built with an insulated foundation and an upgraded building shell with insulation and sealing. They are furnished with at least 6 ENERGY STAR appliances per home, including a refrigerator, stove, dehumidifier and furnace. The new homes also have ENERGY STAR exhaust fans, ceiling fans and light bulbs and the partner family has the option of buying an ENERGY STAR clothes washer and dryer

through us. We install programmable thermostats in each home because heating and cooling accounts for almost half of our annual home energy consumption. The use of ENERGY STAR products reflects our desire to reduce the electric bills for our homeowners, save energy and reduce pollutants.

Habitat for Humanity homes are built following the ENERGY STAR residential construction guidelines and meet the minimum specified requirements. Upon completion, each home is verified and rated by a HERS professional, Cornerstone Energy Conservation Services. Maximum HERS index required to earn the ENERGY STAR rating is 85 in our climate zone. The 13 homes built in 2009 have HERS scores of 70 – 77. During the home ownership training sessions, the partner families learn about the importance of using energy efficient products in their homes and are taught general home maintenance and repair. The savings generated by ENERGY STAR appliances far outweighs any additional cost. It is estimated the total savings for each homeowner is close \$350 each year per house. For the 13 homes Habitat built this year, we estimate a savings of \$4,550 per year.

**9. HOUSING AUTHORITY OF THE CITY OF LOS ANGELES (Regional Award)**

Information: Rudolf Montiel, President & CEO [rudolf.montiel@hacla.org](mailto:rudolf.montiel@hacla.org)

The Housing Authority of the City of Los Angeles (HACLA) is funded by the U.S. Department of Housing and Urban Development to provide very low income residents with public housing and Section 8 housing subsidy. HACLA is the largest public housing authority west of the Mississippi and the largest provider of low-income housing in Los Angeles with 6,514 public housing units in 1,067 multifamily low-rise buildings. With 20,788 residents in its public housing units, HACLA is keenly aware of its responsibility to effect significant reductions in energy consumption by influencing resident and staff behaviors. HACLA helped staff and residents learned that small investments, such as in Compact Florescent Lights (CFLs), and simple energy conservation methods can produce tangible monetary savings. Key to the success of this effort was engaging a mix of staff, trained residents, and the Los Angeles Department of Water and Power. HACLA's comprehensive approach to reduce consumption of electricity included: building organizational and community wide commitment to energy conservation; assessing costs and benefits of implementing agency-wide changes; budgeting and partnering to cover and to mitigate initial outlays; moving conservation forward through procurement . HACLA began its electricity conservation efforts by requiring staff to purchase only CFLs to replace incandescent light bulbs in its 6,514 units. In 2009, 3,150 ENERGY STAR qualified CFLs and 1,087 ENERGY STAR qualified refrigerators were installed in public housing units, saving an estimated 270,000 kWh, removing approximately 357 cars from the road for a year or saving more than an estimated 443 acres of forest. Over the life cycle of these products, HACLA's residents will save approximately \$440,000 in utilities.

**10. IOWA DEPARTMENT OF ECONOMIC DEVELOPMENT (Regional Award)**

Information: Jeff Geerts Special Projects Manager [jeff.geerts@iowalifechanging.com](mailto:jeff.geerts@iowalifechanging.com)

In 2008, IDED launched the Iowa Green Streets Criteria, sustainable design and construction guidelines for affordable housing projects receiving department funding. The guidelines applied to all new single-family home projects, new multifamily home projects and multifamily rehabilitation projects funded by the department in 2009. The guidelines address location efficiency, stormwater management, water conservation, materials beneficial to the



environment, indoor environmental quality, owner and occupant education, and energy efficiency. In addition to requiring ENERGY STAR appliances and the ENERGY STAR Advanced Lighting Package, the Iowa Green Streets Criteria requires all new and gut rehabilitation housing projects to meet the following energy performance levels and to achieve ENERGY STAR:

Use a certified HERS Rater independent of the project team and developer to verify all requirements of the ENERGY STAR Thermal Bypass Inspection Checklist are met. Meet or exceed the requirements of the 2006 International Energy Conservation Code. Pass a pre-drywall inspection by the energy rater verifying proper sealing and insulation practices. Verify that actual construction meets the above listed requirements by having an energy rating performed on each completed unit by a certified HERS rater. Use a certified third-party energy rater to document that the HVAC system was installed correctly for each unit by measuring and documenting actual BTU delivery is 90% or greater of the system's rated output capacity. In 2009 599 ENERGY STAR qualified homes were built and 21 were retrofitted with ENERGY STAR products.

#### **11. JAMBOREE HOUSING CORPORATION**

Information: Mary Jo Goetzer, COO [migoelzer@jamboreehousing.com](mailto:migoelzer@jamboreehousing.com)

Founded in 1990, Jamboree Housing Corporation is an award-winning, broad-based nonprofit housing development company that develops, acquires, renovates and manages permanently affordable rental and ownership housing for working families and lower-income seniors throughout California. Jamboree's development expertise includes new construction, acquisition/ rehabilitation, preservation of at-risk projects and mobile home parks. Its \$1 billion market-value portfolio includes development of and/or ownership interest in 6,000+ affordable rental apartment homes for some 15,000 residents in more than 55 California communities.

From 2003 to 2008, Jamboree built 591 apartment homes with ENERGY STAR appliances for working families. In 2009 alone, Jamboree installed ENERGY STAR appliances in another 172 affordable apartment homes, bringing its ENERGY STAR total to 763 units. Also, 2009 marks the second full year that ENERGY STAR appliances are the design guidelines standard for all units in Jamboree's development pipeline. Currently, that includes 161 units under new construction, another 96 units under renovation (those units needing new appliances may be replaced with ENERGY STAR ones) and an additional 887 units of new construction or renovation in predevelopment over the next five years throughout California.

Opening its first community designed to be Green Point Rated this year, Jamboree is leveraging these successes through media interviews and in predevelopment plans with its vast array of city partners. Jamboree consistently demonstrates that: building green improves the financial feasibility of developments; financially assists residents by reducing their utility bills; promotes resident health through reduced pollution, and underscores Jamboree's responsibility to pursue increased sustainability of the community as part of the overall building industry. It is a natural extension of Southern California's leading affordable housing developer because, outside of rent, one of the largest expenses for residents is utility costs. By creating savings in this area with ENERGY STAR appliances, Jamboree further promotes the financial stability of its residents.

**12. LOUISVILLE METRO HOUSING AUTHORITY (Regional Award)**

Bernard Pincus Director of HOPE VI Development [pincus@lmhal.org](mailto:pincus@lmhal.org)

The Louisville Metro Housing Authority (LMHA) is a quasi-governmental agency that provides quality affordable housing for low and very-low income individuals and families throughout the Louisville Metro area. As of June 30, 2009, LMHA had 4,176 public housing rental units that we owned and managed, and provided subsidy for an additional 610 households in privately managed properties such as Liberty Green. The Authority also administers a Section 8 program with 9,508 participants.

This application highlights LMHA's ENERGY STAR program at Liberty Green, a HOPE VI Revitalization project encompassing approximately 30 acres on six city blocks in Downtown Louisville, as well as Avenue Plaza, an elderly designated high-rise. The Liberty Green rental component, with 443 multi-family low-rise rental units, was completed in 2009. Each of these units has an ENERGY STAR rating and all appliances carry the ENERGY STAR label. (LMHA has fulfilled the green pledge made at the onset of the program).

The homeownership component, with a proposed 275 units, is expected to start this December and there is a contractual commitment to accomplish, at a minimum, the same energy saving criteria. The original green pledge has been enhanced by installing pervious brick pavers on two full blocks (2009) and with a new community building with an anticipated Gold LEED rating (construction started 6/09).

LMHA recently expanded its ENERGY STAR program into an Authority-wide greening initiative. The Authority's Greening Initiative Goals and Comprehensive Action Plan include several ENERGY STAR related initiatives and projects including a special program at Avenue Plaza. LMHA was the winner of the 2007 ENERGY STAR National Award and the 2008 & 2009 ENERGY STAR Regional Award for Excellence in Affordable Housing for its efforts at Liberty Green.

**13. MILFORD HOUSING DEVELOPMENT CORP, DE (Regional Award).**

Information: Russell Huxtable Vice President and COO

In 2009, MHDC, a nonprofit affordable housing developer, built and completed 24 homes in our Mutual Self-Help Program, and 100% of these units are ENERGY STAR homes. Families are grouped together to build each other's homes. They are guided along the process by MHDC with skilled construction supervisors and other staff members. These single family residences each have their own certificate and our participants are seeing the benefits by way of lower utility bills. MHDC currently has another 4 homes under construction in the Self-Help Program that will not be complete until 2010 and another 15 in the pipeline. MHDC has also built and sold 2 affordable spec homes that were ENERGY STAR certified.

All participants are working families earning less than 80% of Area Median Income, with an emphasis on those making less than 50%. MHDC also develops and builds apartment complexes for lower income resident and a few are in the pipeline. It is our commitment to continue to build ENERGY STAR homes so that our families and residents will benefit from lower utility costs and the comfort to know they are conserving resources.

Just three years ago MHDC became an ENERGY STAR Builder. 100% of our new housing, including homes and apartments are ENERGY STAR Homes. This is a policy that just made sense to implement at MHDC. We have compared utility costs from one of our Self-Help homes built prior to our conversion to one that is now ENERGY STAR rated. The homes were identical in model and square footage and there was a significant reduction in the utility cost of the ENERGY STAR home. One of our primary partners, USDA Rural Development, has



acknowledged efforts of builders exceeding current energy codes and those that are building to ENERGY STAR guidelines. For qualifying participants of these ENERGY STAR homes, they can qualify for an additional 2% on front and back end ratios. This can help agencies such as ours serve more people because the gap for financing has just been lowered.

To date we have placed in service 36 senior rental units, 34 Self-Help units, and 2 other ENERGY STAR homes. In our pipeline, we have over 100 units to be developed and our commitment is to meet or exceed ENERGY STAR guidelines. We received guidance from Energy Services Group based in Delaware. They were very helpful in letting us know that we only had to adjust a few things from what we were currently doing to be an ENERGY STAR Builder. They shared with us how simple it could be. They also act as our raters for all our homes and apartments.

The change to 100% ENERGY STAR was minimal so the cost impact to our homes was negligible. That cost was easily absorbed into the cost of our homes and units and acceptable to our lending partners, primarily USDA Rural Development and the Delaware State Housing Authority. The changes had more to do with practice and construction techniques than cost with the exception of appliances. Our clients, who earn less than 80% of median income, can easily afford these changes. The financing partners for the projects completed this year are USDA Rural Development and Federal Home Loan Bank of Pittsburgh's AHP program.

MHDC actively markets being an ENERGY STAR Builder. Our home page on our website, [www.milfordhousing.com](http://www.milfordhousing.com), proudly displays we are a proud builder of ENERGY STAR labeled homes. We give certificates to the homeowners so in the case they sell their home at some point in time; they can advertise that their home is indeed ENERGY STAR. We also place small bronze plates on each home so even our homeowners can proudly acknowledge the fact they are living in an ENERGY STAR home.

#### **14. MISSOURI HOUSING DEVELOPMENT COMMISSION (Regional Award)**

Information: Sandy Middleton, Construction Compliance Manager [smiddleton@mhdc.com](mailto:smiddleton@mhdc.com)

Missouri Housing Development Commission (MHDC), an administrator of state and federal affordable housing programs, is dedicated to strengthening communities and the lives of Missourians through the financing, development and preservation of affordable housing. To date, MHDC has invested nearly \$4 billion to construct, renovate and preserve affordable housing, and is proud of its accomplishments in incorporating energy efficiency standards into the communities with which it works. By requiring the use of ENERGY STAR-rated products, utility costs and energy consumption are reduced, thus furthering the MHDC mission of making housing affordable to the residents of the state of Missouri.

In 2009, MHDC's first two ENERGY STAR-certified developments completed construction of Sand Hills Place and Trinity Village Apartments. Each development achieved a Five Star rating. We began leasing the 80 2-bedroom units. Both developments, which serve the elderly residents of Missouri, have occupancy rates of 100 percent. For both developments, ENERGY STAR-certified status was achieved by utilizing an independent agent to review the design, conduct inspections during the entire construction phase of the development and test for confirmation that the development met the ENERGY STAR standards established by the U.S. Environmental Protection Agency.

In 2007, MHDC required the inclusion of ENERGY STAR refrigerators and dishwashers as the minimum threshold. In 2008, in concert with the 2009 Notice of Funding Availability

(NOFA), MHDC began to require the inclusion of ENERGY STAR-rated windows, heating, ventilation, air conditioning equipment (92% AFUE gas-fired furnace rating and/or SEER 13 air conditioning/ heat pump) and water heaters where applicable.

In financing the development of Trinity Village Apartments, MHDC used HOME funds and partnered with US Bank for the construction and permanent financing of the development, along with state and federal Low Income Housing Tax Credits (LIHTC) purchased by Missouri Equity Partners, LLC. The leveraging of the loan with the tax credits enabled the owner to keep rents affordable for the elderly residents of the development. MHDC used HOME funds to provide the construction and permanent financing of Sand Hills Place. LIHTC were also purchased by Missouri Equity Partners, LLC for this project. Like Trinity Village, the leveraging of the loan with the LIHTC enabled the owner to keep rents affordable for the residents of the development. Funding rounds in 2009 resulted in 14 funding proposals being approved that included ENERGY STAR certification as a part of the application package. The proposals will result in 500 ENERGY STAR-certified units for families and elderly residents, including both multifamily housing structures and single family homes.

MHDC has found developments incorporating ENERGY STAR certification to be competitive in construction costs with those that do not include this feature. Through communication with developers, it is estimated that the cost to include ENERGY STAR certification will not exceed \$3,600 per unit to build, and will result in cost savings during the operation of the development.

The leasing agent for Trinity Village Apartments provides brochures to the resident about the ENERGY STAR features in the unit being leased. At the weekly resident mixer event, residents are encouraged to ask questions about the usage of the ENERGY STAR appliances, and are reminded to contact management when light bulbs need replaced. The owner of Sand Hills Place Apartments gathered utility data from six residents regarding October 2009 electric utility bills. We are pleased to report those six units received electric utility bills averaging \$35 for that month. Both developments have staff trained in the maintenance of ENERGY STAR features.

#### **15. OTERO COUNTY HABITAT FOR HUMANITY (Regional Award)**

Information: Jay Harrell, Building Committee Chair [OCHFH\\_bc@zianet.com](mailto:OCHFH_bc@zianet.com)

Otero County Habitat for Humanity has built four single family ENERGY STAR Five Star homes this year; we will complete another early next year. These homes feature ENERGY STAR windows, HVAC, and refrigerator. We use OVE framing and increase insulation. The home we are currently building has ENERGY STAR shingles.

We have built and sold 25 houses. We build four to five houses per year. We have had minimal cost increase for our ENERGY STAR houses. We offset some cost increases with things such as going to OVE framing and careful purchasing of materials and services. The annual energy cost savings for our four 2009 homes is projected to be \$1,543. Copies of our ENERGY STAR reports, pictures and floor plans of the houses are attached. We promoted energy efficiency to make the operating cost of the homes affordable. We had a goal of building ENERGY STAR Homes, we have built nine five star plus homes.

We are dedicated to building ENERGY STAR Homes. We are involved in the Build Green New Mexico program that mandates energy conservation and sustainable building; this affects what products and procedures we use. We have set as a goal to build Net Zero homes and are working with the Build America Program and are being advised by ConSul in this endeavor. Attached is a schedule that shows how we are obtaining funds to build these homes. Our target market are homeowners in the very low income range (50% of median income). The nine homes we have built over the last three years are projected to save over \$3,400 per year in energy cost. We look forward to building more ENERGY STAR homes

**16. St. Johns Housing Partnership (Regional Award)**

Information: Bill Lazar, Executive Director [sjhpb1@bellsouth.net](mailto:sjhpb1@bellsouth.net)

St. Johns Housing Partnership is a non-profit community development organization in the nation's oldest city, promoting safe, decent, and affordable housing in St. Johns County, Florida. Since 1996, SJHP has done this by creating programs that serve low income and working class families. SJHP programs offer home repair and weatherization services to low income homeowners, credit counseling and foreclosure mitigation services and a new construction program for workforce housing that is one of the leaders in the state in green building and ENERGY STAR accomplishments. SJHP built 12 ENERGY STAR qualified homes in 2009.

The first SJHP affordable housing development, Hancock Place, is a 36 unit subdivision that offers an alternative to substandard housing in a minority neighborhood. It produced one of the first ENERGY STAR and green-certified affordable homes in the County. The first phase began with the simple goal of building decent affordable homes that were both low maintenance and had low utility costs. Mid-way through Phase 2, with the help of USAHERS, our ENERGY STAR rater, we retro-fitted ten homes and achieved an average HERS index of 72. With a focus on high energy efficiency and water conservation, our first foray into green-building began. With the help of our rater and green consultant, we experimented with different construction techniques. By the final phase, HERS index scores were between 69 and 71. The latest home just scored platinum, according to the Florida Green Building Coalition.

In 2009, SJHP celebrated its accomplishments ahead of the energy conservation and green building curve not only locally but across the state. About a decade after being founded, SJHP has proven its worth as a small but leading-edge nonprofit in housing initiatives not just as an advocate, but as a producer of affordable housing with an environmental edge for energy efficiency, water conservation, and green building. Their ENERGY STAR Marketing phrase goes "Green Begins with Energy Star Blue."

**17. TriState Habitat for Humanity**

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Since becoming an ENERGY STAR Partner, we have built and qualified 14 ENERGY STAR homes with an average Home Energy Rating Systems (HERS) Index of 62.42 with four homes rating at 55 or below. TriState Habitat for Humanity is the only Affordable Housing ENERGY STAR Partner to qualify any homes in the Greater Cincinnati-Northern Kentucky area. TriState Habitat for Humanity is 100% committed to ENERGY STAR. In 2009, TriState Habitat built and certified by both LEED and NGBS our first Green Built Home. This home scored the Green Certification of Gold with a HERS index of 52. This home featured the use of an ENERGY STAR Advanced Lighting Package. This home was sold to the family for \$75,000.00, which included the land value. The cost of this home, as with all of our homes, was not subsidized, showing that you can build a high performance home at an affordable cost.

In addition to the home above we have qualified five other homes this year and have three more pending before the end of 2009. In 2009, we established building performance standards for construction of our homes. These standards include the requirement that all homes be qualified ENERGY STAR and built to strict specifications. This furthers our commitment to the families to build the most affordable energy efficient homes, while becoming better stewards of our natural resources. Along with these standards we are improving our training materials, workshops, volunteer training and homeowner education. In conclusion, 2009 has been a banner year for TriState Habitat by qualifying homes with lower HERS scores, making a 100 percent commitment to the ENERGY STAR Program and by improving our operations and construction practices to build a better affordable home for our families.