

GHI Partners with NAHB Research Center to Pilot an Energy-Efficient Community Upgrade

Greenbelt Homes, Inc (GHI), a cooperative housing association in Greenbelt MD, has been selected to receive technical assistance from the Department of Energy's Building America Program through partnership with the NAHB Research Center. The goal of this joint effort is to develop replicable, cost-effective retrofit solutions for the GHI community that dramatically reduce the average energy use while improving homeowner comfort and increasing the homes' value. By partnering with the NAHB Research Center, a subsidiary of the National Association of Home Builders (NAHB), GHI will be able to develop a viable, affordable, and energy efficient "community upgrade" plan for its 1,600 existing homes.

"2015 will be a big year for GHI," says Tokey Boswell, Vice President of the cooperative. "We will need to begin replacing all of our windows, doors, and baseboard heaters. All of these components, plus our vinyl siding, will be at the end of their useful life. At the same time, we need to think about the future viability of these homes, which are 60-70 years old. We need to consider whether we should add insulation, put in different heating systems, or add air conditioning as a standard feature. This partnership opportunity is going to help us figure out what makes sense and will be affordable for our members."

The Pilot Project, beginning in November 2010, will include 28 GHI homes to determine the most cost effective and energy efficient solutions. Building America funding will allow GHI and the Research Center to measure how the homes are currently performing, recommend and implement improvements, and then test to make sure that those improvements perform as planned. "We need data about the cost of the improvements and the energy savings that result, so that the membership can decide whether to approve a multi-million dollar project" said Sylvia Lewis, Treasurer of GHI. "It makes sense to test the recommendations on a small number of homes to determine the optimal solutions for the broader community."

GHI plans to study the improvements from the Pilot Program over the next three years, according to Jim Cohen, chair of GHI's Buildings Committee which is leading the project. "We have three kinds of homes in GHI – brick homes, frame homes with vinyl siding, and very unique cinder block homes. Each of them needs different improvements in order to perform better, so we're testing multiple rows of each kind of home."

This project is a win-win-win scenario. GHI as a Building America team partner is a natural fit for the NAHB Research Center, based in Upper Marlboro, MD, because the Greenbelt community provides a number of variables that will allow the Research Center to design and evaluate energy upgrades for multiple construction types all in one location. GHI and its community members will benefit from the partnership by having access to building scientists, monitoring equipment, program design, and data analysis from the Research Center, all covered under the Building America funding. And, ultimately, the existing housing stock in similar climate zones across the country will benefit from the results of this project which DOE will be able to share through Building America.

The Building America Program has a stated goal of improving energy efficiency in existing homes by 30% over current performance levels. “For GHI, there’s more than just lower costs, though,” says Cohen. “It’s a matter of improving occupant comfort. Our members can be uncomfortable in the winter when it’s too cold and in the summer when the temperature is high. Improving the building envelope through better windows and doors, and sealing the leaks in the attics and crawlspaces, will result in more livable homes, and better value for potential members in the future.”

More information on the Pilot Program for the Community Upgrade is available by calling the GHI offices at 301-474-4161, extension 128.