

The Cultivate Green Steering Committee would like to thank those that attended the Tuesday night Green Homes 101 lecture, "What is an Energy Star Home?" We would also like to give a special thank you to the speakers that volunteered their time to help us further the Cultivate Green mission.

John Ashe	ICF Consulting	Craig Dudley	Wilshire Homes
David Dzuerski	CenterPoint Energy	Mark Curry	Energy Senses
Bill Bartle	David Powers Homes	Maci McDaniel	Nelrod Company
Brannon King	Phillips Inspection Services		

Our speakers presented a solid picture of just what it means for a home to receive the Energy Star designation. We found out that there is a lot more to this designation than energy efficient appliances. An Energy Star home must be at least 30% more energy efficient than homes built according to the 1993 national Model Energy Code or 15% more efficient than the state energy code, whichever is more rigorous. These savings are based on heating, cooling, hot water energy use and are typically achieved through a combination of: building envelope upgrades high performance windows, tight duct systems, controlled air infiltration and upgraded heating and AC systems. These features contribute to improved home quality and homeowner comfort, and to lower energy demand and reduced air pollution. ENERGY STAR also encourages the use of energy-efficient lighting and appliances, as well as features designed to improve indoor air quality.

The ENERGY STAR homes located in this region constructed by Houston home builders are independently verified. Builders are free to select the energy efficiency features used in their new qualified homes.

The ENERGY STAR for Homes program is a government program administered by the Department of Energy (DOE) and the Environmental Protection Agency (EPA). CenterPoint Energy is an award-winning supporter of this program. It has been a program partner since 2000 and each year has received the ENERGY STAR Partner of the Year award for its outstanding contribution to reducing greenhouse gas emissions by qualifying energy-efficient homes that earn the ENERGY STAR.

It was gratifying to learn that both Wilshire Homes and David Powers Homes have made a strong commitment to the Energy Star program. Each of these very large residential home builders design and build their homes to go beyond the Energy Star requirements.

The hit of the evening were the home energy raters. They discussed the home energy rating process and what it includes, how it works and what it means? The Home Energy Rating System (HERS) is based on a scale of 0 to 100. Homes meeting the 1993 Model Energy Code (MEC) have a rating of 80 or higher on the HERS scale. Each energy point above 80 is equal to 5% more energy efficiency. A home must have a HERS rating of 83, equivalent to 15% more energy efficiency, to qualify for IECC.

An Energy Star home must have a rating of 86 or higher. These homes are 30% more energy efficient than homes built to the MEC Code and 15% more efficient than the IRC and IECC Code. Energy Star Homes are performance tested and third party verified. Builders can take advantage of profiling a home before construction is started to insure an energy efficient home rating. A building profile includes square footage, ceiling heights, wall area and materials used to construct the home such as types of insulation, windows, HVAC and water heater ratings. The rater uses all the information

to analyze the plans and make recommendations on what improvements if any need to be made to meet the Energy Star Home Rating. Raters also run Energy Efficiency Audits on existing homes. The rater can then make recommendations on upgrades in building materials and equipment needed to reach the desired efficiency. These audits are primarily used to obtain an Energy Efficient Mortgage to finance improvements to the home.

Raters educate builders' superintendents, their subcontractors, sales staff and the public thru training sessions. Energy Star 101 provides the understanding of the importance of tighter construction, correct installation of insulation and HVAC equipment.

Two important tests done by the raters are the Lower door test and the leakage test. These help identify areas to improve energy efficiency.

This event concluded as each of the other workshops with a myriad of questions. Thankfully there are additional events planned. Our next in the series, The Natural Step, is April 5 from 6-9pm at the University of Houston.

The Natural Step (TNS) seeks to foster the use of a compelling new framework within the corporate, academic, governmental and community sectors to support two key societal shifts: 1) widespread understanding of the root source of our environmental challenges and, 2) use of innovative and profitable strategies that foster economic and environmental sustainability in commerce and human society at large.

We look forward to seeing you again soon,  
Brian Yeoman  
[www.harc.edu/harc/Projects/CultivateGreen/](http://www.harc.edu/harc/Projects/CultivateGreen/)