A Green Home Begins with ENERGY STAR Blue

Homebuilders and homebuyers across the country are increasingly interested in green building. But what exactly makes a home green?

Green building means improving the way that homes and homebuilding sites use energy, water, and materials to reduce impacts on human health and the environment. Building a green home means making environmentally-preferable and sustainable decisions throughout the building process—decisions that will minimize the environmental impact of the home while it is being built and over the many years it will be lived in.

There are nearly 50 regional and national green home labeling programs around the country. While each program approaches green building a little differently, each incorporates important elements such as:

• Energy-efficient construction techniques and products.
• Improved indoor environments through environmentally-preferable materials and building practices.
• Water-efficient products and processes.
• Renewable energy options, when feasible.
• Waste reduction and recycling during the construction process.
• Smart growth and sustainable land development practices.

What should homebuyers look for first in a green home?

Energy efficiency is the place to start. That’s because the energy used in homes often comes from the burning of fossil fuels at power plants, which contributes to smog, acid rain, and risks of global climate change. So, the less energy used, the less air pollution generated. And the easy way to make sure a new home is energy efficient is to look for the blue ENERGY STAR mark, the government-backed symbol for energy efficiency.

ENERGY STAR qualified homes are independently verified to meet strict guidelines for energy efficiency set by the U.S. Environmental Protection Agency. These homes save money on utility bills, provide a more comfortable living environment with better indoor air quality, and help protect the environment.
Typical features to look for in ENERGY STAR qualified homes include:

- **An Efficient Home Envelope**, with effective levels of wall, floor, and attic insulation properly installed, comprehensive air barrier details, and high-performance windows;
- **Efficient Air Distribution**, where ducts are installed with minimum air leakage and effectively insulated;
- **Efficient Equipment** for heating, cooling, and water heating;
- **Efficient Lighting**, including fixtures that earn the ENERGY STAR; and
- **Efficient Appliances**, including ENERGY STAR qualified dishwashers, refrigerators, and clothes washers.

These energy efficiency improvements save homeowners money—about $200 to $400 per year on utility bills. More importantly, monthly energy savings can easily exceed any additional mortgage cost for the energy efficiency improvements, resulting in a positive cash-flow from the first day of home ownership. As a result, the cost-effectiveness of ENERGY STAR improvements can help offset additional costs associated with other green home features.

**What comes after energy efficiency?**

Homebuyers can also look for the ENERGY STAR Indoor Air Package label—a new specification developed by EPA to address the indoor environment component of green building. Homes that achieve this level of excellence are first qualified as ENERGY STAR, and then also incorporate more than 60 additional home design and construction features to control moisture, chemical exposure, radon, pests, ventilation, and filtration. Together, these features help protect qualified homes and their residents from mold, chemicals, combustion gases, and other airborne pollutants.

**Completing the green home picture**

Through ENERGY STAR qualified homes and the ENERGY STAR Indoor Air Package, homebuyers can address two critical green home elements. Then, look to the wide variety of available green home programs to complete the picture with water-efficient products, renewable energy technologies, waste reduction, recycling, and sustainable land development practices.