



Building to Energy Star Standards

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A programmable thermostat can save energy and money. (Photo courtesy of the West Penn Power Sustainable Energy Fund)

What is Energy Star?

Energy Star (<http://www.energystar.gov>) is a government program that certifies appliances, buildings and homes to help consumers save money and protect the environment. Energy Star also offers solutions to increase the energy efficiency of a home, making it more comfortable while reducing energy costs. A home that earns the Energy Star certification is significantly more efficient than a standard home and costs less to run.

How can I build an Energy Star home?

More than 9,000 organizations and over 3,500 of the nation's homebuilders are Energy Star partners. They will ensure your new home is tightly constructed, sealing holes and cracks to reduce draft

and moisture and properly installing insulation to ensure even temperatures throughout the house while using less energy. They'll also install an energy-efficient heating and cooling system with a programmable thermostat, high performance windows and Energy Star products such as light fixtures, ventilation fans and appliances.

After construction, an independent Home Energy Rater will conduct on-site inspections and tests to verify your home's energy efficiency. Energy Star homes are at least 15 percent more energy efficient than homes built to the 2004 International Residential Code (IRC), and include additional energy-saving features that typically make them 20 to 30 percent more efficient than standard homes.

Energy Star in Pennsylvania

Solar water heaters need solar radiation and electricity. The pump that is used to push the water through to the storage tanks Energy Star is a joint program of the U.S. Environmental Protection Agency (EPA) and the U.S. Department of Energy (DOE). In Pennsylvania, Energy Star is partnering with PA Home Energy (<http://www.pahomeenergy.com/>), a new program that helps Pennsylvania

consumers reduce their home energy use. The program integrates the general principles of whole house performance with green home design.

PA Home Energy is being piloted in the 23-county West Penn Power (WPP) service region that provides electricity to over 710,000 residential customers. As the program grows, the PA Home Energy team will work to expand the program throughout Pennsylvania. To date, more than 700 homes in Pennsylvania have been built to Energy Star standards, increasing their value while lowering ownership costs and helping to prevent greenhouse gas emissions.

either runs off the house electricity, controlled by a thermostat that senses when solar heat is available, or from a small solar photovoltaic panel and circulates when the sun shines on it. Electricity use for the pump is quite small.

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Energy Star in P What issues are limiting its adoption?

Building an Energy Star home is more expensive, but homeowners can expect to save up to \$400 a year in energy costs. Over the 7 or 8 years that a typical buyer lives in a home, it can add up to thousands of dollars saved. There may also be additional savings on maintenance of the home, since Energy Star homes have greater durability, due to better protection against cold, heat,

drafts, moisture, pests pollution and noise.

In addition, building an Energy Star home increases the value of the home, making it a smart investment. Since they use less electricity, they also help prevent greenhouse gas emissions, an added benefit for consumers looking for “green” choices.

Additional Resources

Energy Star Program
<http://www.energystar.gov>

PA Home Energy
<http://www.pahomeenergy.com/>

Keystone Help Energy Loan Program
<http://www.keystonehelp.com/>