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FirstEnergy Companies

Pennsylvania Energy Efficient New Homes Program

Press Kit

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Program Synopsis

The Pennsylvania Energy Efficient New Homes Program is a financial incentive program to encourage the construction of new homes that are built to ENERGY STAR V3.0 standards, which provides benefits to both homeowners and builders. The incentive program provides hundreds of dollars to builders for each home constructed and certified to meet program requirements.

Reasons why builders have shown interest in joining the program include:

- 1. ENERGY STAR certified homes have shown to **sell faster** and for **more money** than comparable non-certified homes. Customers recognize the value that a more efficient home provides, and they are willing to pay a premium. With ENERGY STAR V3.0 certification, builders are using higher quality products in the home that last much longer, providing less maintenance, replacement and repair costs versus non-certified homes. In addition, certified homes continue to provide incremental value when the home is being sold again.
- 2. Customers would prefer to spend money on home options versus energy bills. Homes that meet ENERGY STAR V3.0 cost less to operate, allowing families to upgrade while staying on budget.
- 3. Customers value the health, safety and comfort of their homes. Certified homes are cooler in the summer and warmer in the winter than homes not meeting the standard. The standard also addresses common causes of discomfort including improper ventilation and moisture issues, helping ensure the home provides "no surprises" to customers, and allowing families to enjoy their new home. Builders or raters can promote these benefits to customers over the competition.
- 4. FirstEnergy is providing incentives to builders to build ENERGY STAR V3.0 certified homes. FirstEnergy is providing builders with \$400 + \$0.10 kWh saved annually over a non-certified reference home. ENERGY STAR homes use up to 30% less energy than non-certified homes. As the average American home uses over 11,000 kWh per year, performance incentives of \$0.10/kWh provide builders with hundreds more depending on the size of the home and installed energy measures.
- 5. The certification process is streamlined for builders of multifamily homes. There is an opportunity of economies of scale, where multifamily builders could save on rating costs as the building envelope is inspected as one, even though each unit needs to be rated individually.

For homes to be included in the Pennsylvania Energy Efficient New Homes Program, builders must:

- Meet ENERGY STAR V3.0 standards
- Demonstrate the homes operate at least 15% more efficiently than current code requirements
- Build the home on or after:
 - o 10/28/09 (for Penelec, Met-Ed, or Penn Power)
 - o 6/1/13 (for West Penn Power)
- Locate the home within the service areas of a FirstEnergy Pennsylvania Operating Company (Penelec, Met-Ed, Penn Power, West Penn Power).

FirstEnergy's Pennsylvania utilities are promoting this program in conjunction with homebuilder associations and rater organizations across Pennsylvania.

For more information go to energysavepa-newhomes.com or contact:

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The following articles and case studies discuss the Pennsylvania Energy Efficient New Homes Program as well as the counterpart program operated by FirstEnergy's Ohio utilities.

The Pennsylvania Energy Efficient New Homes Program is building off the success of the Ohio program by seeking to increase the number of ENERGY STAR certified homes in Pennsylvania.

Articles

At Home in Berks Magazine

Incentivizing Efficiency: FirstEnergy, ENERGY STAR partner to encourage high performance home building

By Mike Arblaster, Program Coordinator Performance Systems Development August 2014

Homebuilders in Pennsylvania now have an additional incentive to build energy efficient homes. FirstEnergy's Pennsylvania utilities and ENERGY STAR® have partnered together to create the Pennsylvania Energy Efficient New Homes Program, which provides financial incentives to builders of new homes that meet ENERGY STAR V3.0 standards. For each newly built home serviced by Met-Ed, Penelec, Penn Power, and West Penn Power that receives ENERGY STAR V3.0 certification, the builder is eligible for a rebate of \$400 plus \$0.10/kWh saved annually over a non-certified "reference" home built to the standard 2009 IECC code.

For a home to qualify for the program (in addition to meeting ENERGY STAR V3.0 standards), it must be 15% more efficient than the current 2009 IECC code, must be located within the service area of a FirstEnergy's Pennsylvania utilities (Met-Ed, Penelec, Penn Power, or West Penn Power), and must have a certificate of occupancy date on or after October 28, 2009, for Met-Ed, Penelec and Penn Power, and June 1, 2013, for West Penn Power.

ENERGY STAR® Homes are differentiated by the performance of the home's building envelope and installed energy consuming equipment. Examples include:

Effective Insulation Systems

An effective Insulation System ensures even temperatures throughout the house, lowering utility costs and improving quality. The quality insulation also keeps a home much quieter.

Tight Construction

A tightly sealed home improves comfort and air quality by reducing drafts, moisture, dust, pollen, pests and noise. The tight construction will lower utility and maintenance costs.

Efficient HVAC Equipment

Energy efficient HVAC systems are quiet and regulate humidity to improve comfort while using less energy to operate.

High Performance Windows

High performance windows use advanced technologies to help keep a house warm in the winter and cool in the summer.

Efficient Lighting and Appliances

Energy efficient products such as lighting, fixtures, fans and appliances help further conserve energy throughout a home.

Third party testing for guaranteed quality assurance

A HERS rater is responsible for ENERGY STAR certification. When a rater certifies the home, they provide the ENERGY STAR seal on the home for guaranteeing ENERGY STAR quality and adding credibility. Make sure to show your homebuyers the ENERGY STAR seal.

There are many reasons why a builder should get involved with The Pennsylvania Energy Efficient New Homes Program. First, ENERGY STAR certified homes have shown to sell faster and for more money than comparable non-certified homes (based on average sales price and time on the market in the study: *Market Impacts of ENERGY STAR Qualification for New Homes*, Appalachian State University 2011). Customers want a comfortable home, especially during hot summers and cold winters. Nobody likes sleeping in a bedroom on the top floor that is uncomfortably hot during the summer, or spending time in a room during the winter that is drafty, or so dry that they get a static shock when they touch a doorknob. ENERGY STAR V3.0 ensures a home is tightly sealed and comfortable during any season.

Second, customers also want to spend less on their utility bills. With the efficiency standards of ENERGY STAR V3.0, they will save money all year. Additionally, ENERGY STAR V3.0 certification means that builders are using higher quality products in the home that last much longer, so customers can save long term on replacements and repairs. Certified homes are tightly sealed, which not only keeps them cooler in the summer and warmer in the winter, but also prevents unwanted dampness and mold. This not only adds to the comfort of the home, but also increases its durability, which means even less repairs down the road when the buyer is interested in selling the home. For these reasons, customers are demanding ENERGY STAR certification when buying a new home.

Third, FirstEnergy's Pennsylvania utilities are providing incentives to builders to build ENERGY STAR V3.0 certified homes. FirstEnergy's Pennsylvania utilities are also providing builders with \$400 + \$0.10 kWh saved annually over a non-certified reference home. Since ENERGY STAR homes can save 30 percent or more in energy use than non-certified homes, the \$0.10/kWh rebate could amount to hundreds of dollars or more depending on the home. The more efficient the home, the higher the rebate, and builders of multifamily projects receive an incentive per unit, which could equal thousands of dollars per building!

Builders who participate in the program will also receive free technical training, marketing materials and recognition on the program's website.

In today's housing market, homebuyers look at many houses and weigh countless options before they ultimately choose the house that they will call "home." Partnering with The Pennsylvania Energy Efficient New Homes Program and building to ENERGY STAR V3.0 standards helps your houses stand out from the rest by providing homebuyers with more comfortable, durable, energy-efficient homes.

For more information go to energysavepa-newhomes.com or contact:

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The News-Herald (Ohio)

FirstEnergy's Ohio utilities want to make selling energy efficiency as easy as PIE

By Rob Shearer Senior Program Coordinator, Performance Systems Development April 19, 2014

Anyone that has purchased or sold a home has heard the term PITI: Principle, Interest, Taxes and Insurance. PITI is a formula that helps buyers and lenders figure out how much home the buyer can afford. This formula, however, leaves out a very important cost of home ownership. Energy costs are an inescapable cost of owning a home, yet the common PITI formula leaves these costs completely out of consideration.

As a homebuilder, you have little control over taxes and insurance, and it is difficult to differentiate your product from the competition based on these two criteria. On the other hand, the options and construction quality that you put into a home can have huge impacts on the energy costs associated with owning a home.

So at the Energy Efficient New Homes Program offered by Ohio Edison, The Illuminating Company, and Toledo Edison, FirstEnergy's Ohio utilities, we'd like you to talk about PIE: Principle, Interest, and Energy. How much PIE can your buyer afford? How big is each piece of PIE? And most importantly, how can PIE be optimized to serve a home buyer's best interests, and yours? Remarkably, when it comes to PIE costs, the interests of the buyer and the builder are perfectly aligned.

An ENERGY STAR® certified new home will give your buyers the confidence that the biggest possible pieces of their PIE go toward the fixed costs of Principle and Interest, making the preparation of their monthly budget easier and more predictable. They also get a more comfortable, durable home, and will have the confidence that their home has been tested, verified, and inspected by multiple layers of third party experts, with a certification label provided through the widely recognized ENERGY STAR program.

As a builder of ENERGY STAR homes, you can have that same confidence in third-party inspections that can reduce callbacks. Also, several national studies have shown that ENERGY STAR certified new homes sell faster and fetch higher prices than non-certified homes. Through ENERGY STAR and the Ohio Energy Efficient New Homes Program, ENERGY STAR builders can get free marketing materials and specialized training to help them grow their businesses. Optimizing the PIE costs also means that with the same sized PIE, your buyers can afford more home, because less of that PIE is going toward the monthly utility bills; and higher sales prices can mean increased profits.

The prospects of improved affordability of homeownership and increased profitability for builders are two reasons that FirstEnergy's Ohio utilities decided to make ENERGY STAR certification a prerequisite for builder incentives. The other requirements are that the home must be served by one of FirstEnergy's Ohio utilities, and that it be at least 15 percent more efficient than the code under which the home was permitted. Builders of new single-family homes, multifamily developments, and full gut rehabs may be eligible for financial incentives.

Case Studies

Case Study 1: Homeowner Anna-Katrin Strauss

When buying her new home, Anna-Katrin Strauss wasn't going to settle; she wanted a home that was comfortable and energy efficient. Other builders told her that they could build the home she wanted if she could "cut out all of the 'green' stuff," but that wasn't the home that she wanted.

Working with a builder in the Ohio Energy Efficient New Homes Program, Anna-Katrin, her husband Mark, and their two children moved out of their older 2,000 square-foot home in Cleveland into a brand new 3,000+ square-foot ENERGY STAR® certified new home in nearby Rocky River, Ohio.

In her previous home, Anna-Katrin would constantly adjust the temperature. She would turn down the heat to 52 degrees overnight in the winter and pile under the covers. Despite her efforts, Anna-Katrin would still receive a \$400 heating bill in the winter and regularly spend \$2,800 annually.

The Strauss's new ENERGY STAR home was built in 2012. The home is not only more comfortable than their previous house in Cleveland but also costs less to operate, even though it's more than 1,000-square-feet larger. Instead of setting their thermostat at an uncomfortably low temperature during the day and even lower overnight, Anna-Katrin now keeps her thermostat at a comfortable temperature day and night without worrying about wasting money.

Anna-Katrin and her husband Mark both work from home with two small children, and they don't like to eat out very often. Their home is also always "working," yet their bills are extremely low.

The Strauss's new ENERGY STAR home with electric air conditioning and heating only used 370 kWh in July. Their electric bill averages \$66 per month and they have never had a bill over \$100, even in the winter. The gas bill (for water heating only) is consistently around \$27 per month, of which \$23 is a service charge. Living in their new ENERGY STAR home, they are paying \$1,600 less each year in overall utilities.

All in all, when combining the mortgage and utility cost, the Strauss's have an extra 1,000 square feet of living space, as well as a more comfortable and durable home for only \$65 more per month than before because of a higher mortgage payment.

	Utility Costs			Mortgage	Mortgage + Utilities
House	Electric	Gas	Total	Monthly	Monthly
Old Home	\$113	\$115	\$228	\$1,200	\$1,428
ENERGY STAR Home	\$66	\$27	\$93	\$1,400	\$1,493

Case Study 2: Home Builder Matt Berges

Matt Berges is not an ordinary builder. Matt has been building high quality, customized energy efficient homes in the Cleveland area for more than 12 years. While building the homes, Matt found incentives to use alternative energy sources, such as solar and geothermal; however, Matt had not heard about the Ohio Energy Efficient New Homes Program's incentives for energy reduction until 2012.

"I was always annoyed that there weren't incentives to build a tight, energy efficient house. There were incentives for solar and geothermal but nothing (in Ohio) for Energy Star."

Matt never had an issue building to the level of ENERGY STAR®, and he felt that it was a small barrier to get past. When he joined the program, Matt's additional cost to certify each home was a little over \$1,000. With the Ohio Energy Efficient New Home Program incentive of \$400 + 0.10kWh saved annually over a similar house built just to code, Matt's up front costs are paid for — and more!

"I think it makes so much sense to incentivize energy reduction instead of energy production."

With more homes being built to higher energy efficiency standards, Matt has let other builders and architects know about the program so they can take advantage of the incentives. "I try to talk with builders and developers about pushing the level of energy efficiency. They don't generally think about being more energy efficient, but when you're talking about \$1,200 or \$2,000 a home, that's something worth thinking about."

While Matt has always looked to build to higher standards, the program allows him to push the boundaries of energy efficiency, and get money back to do so. The program used to have a cap limit of \$1,200 per home, but in 2013 the cap was lifted so Matt is looking to take maximum advantage of the program.

For the builders out there who already build to a higher quality of energy efficiency, getting to ENERGY STAR levels is a small barrier that can pay for itself.

"The program incentivizes people to go beyond the standard. It's a great program and I'm glad it's out there."