New Homes – Program Plan 2015

New Homes

Mark Wyman | Monica Blakeslee-Kish

Overview:

In 2015, the program team will continue to build on program successes, streamline processes and program offerings while expanding into new markets, bringing on new ally groups and increasing market share. The program team will increase field support to trade allies and program allies, which are key to increasing market share and savings. Program marketing will focus on reaching the customer or homeowner to drive EPS market awareness and demand. New standalone measure options are in development and implemention will help reach previously under utilized areas outside the Portland Metro region. Residential multifamily incentives will be developed in coordination with the New Buildings program to provide services to all possible market segments within the residential new construction market. The program will deliver increased gas and electric savings to Energy Trust within levelized cost targets and continue to transform the new construction market to prepare for the 2017 code change.

Stakeholder coordination is expanding to offer new opportunities in 2015. The program will continue to partner with Conservation Services Group (CSG) to deliver technical and training support, as well as direct field support. The Oregon Homebuilders Association and the Homebuilders Association Portland Metro will continue to be utilized as partners to reach regional markets and deliver a voice for energy efficiency within their organizations and at the state level. A new partner for the program in 2015 is Earth Advantage. They are uniquely positioned to reach the real estate broker, lender and appraiser markets, as well as home builder developers to increase EPS potential in entire neighborhoods or housing developments. With these new and continuing partnerships the program will be able to deliver cost effective solutions to customers.

Building on past successes, New Homes will continuously advance program offerings and prepare the market for 2017 code changes and beyond, strengthen and expand Energy Trust's partnerships with market actors, increase savings and program value through efficient, market-led delivery and provide an exceptional experience at all program touch-points.

The program team will also continue to work with Energy Trust to bring new cost effective measures to market, such as furnaces with variable speed motors and low flow showerheads; improve program efficiencies; and enhance trade ally, program ally, customer engagement and satisfaction.

Overview of Overall Savings and Incentives:

Overall 3,379,442 kWh and 281,805* therms in reportable savings and incentives of $5,044,472. By utility this translates to:

- PGE – 2,264,378 kWh and incentives of $1,882,747.37
- PAC – 1,115,064 kWh and incentives of $809,453.57
- NWN – 244,540 therms and incentives of $2,093,754.16
- CNG – 37,265 therms and incentives of $258,517.10

** This does not include market transformation savings and compares against 2014 contracted savings goals and incentive budget.*

2015 Gas Market Transformation Savings*

- NWN – 457,230 therms
- CNG – 45,736 therms

**Gas market transformation savings are included in the overall cost effectiveness of the New Homes program; however, market transformation savings are tracked separately from the remainder of the program savings.*

2014 to 2015 Year To Year Comparison

	2014	2015
kWh	1,388,820	3,379,442
therm	270,782*	281,805**
Incentives	$3,608,864	$5,044,472

*does not include gas market transformation savings of 553,300 therms used to build the 2014 budget
**does not include gas market transformation of 502,966 therms used to build the 2015 budget

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Measure Category	Units
EPS Homes	2,195
Solar Ready	225
Solar Ready verifications	225
Stand Alones	417
Air Sealing	600

Multifamily	200

Objectives:

- Continue to grow market share of new construction homes that receive an EPS through Energy Trust's New Homes Program.
- Extend program reach to capture savings opportunities in new areas; including small multifamily, new stand alones, increased solar uptake and expansion into new demographic areas.
- Continue to collaborate with market actors such as home builder associations, builders, subcontractors and verifiers to prepare the market for the next building code change in 2017.
- Partner with Earth Advantage to provide a new level of engagement with real estate allies, lenders and appraisers to increase program awareness with the homeowner. The new level of engagement will provide a holistic approach to the home sale process and its players. New trainings for appraisers, brokers, lenders and home inspectors to recognize the value of energy efficiency in a home will be developed. Leverage and grow the REA network by providing new tools such as an enhanced appraisal addendum and cooperative marketing strategies.
- Continue to support affordable housing organizations such as Habitat for Humanity but offer new strategic partnership tactics to increase the program reach outside of the Portland area and diversity within the customer base.
- Create a new upstream incentive driving developers to integrate energy efficiency standards into the lot selection process. Builders meeting the efficiency standards will be given top priority on lot choice and will also have access to cooperative marketing funding and support. Additional marketing support and incentives for developers will be provided during the planning stages of a development to implement energy efficiency standards into their master plan.
- Refine implementation and optimize delivery mechanisms for program participants.
- Provide new technical and solar field training and support staff to support free market verifiers and subcontractors.
- Offer regional support through a new account manager that will target demographic segments such as affordable housing and multifamily. Use new marketing strategies to engage homeowners and increase awareness of EPS and Energy Trust offerings.

Strategic Approach and Tactics:

1) Grow market share of new construction homes that receive an EPS through Energy Trust's New Homes Program. All participating new homes that exceed code by 10 percent and meet Energy Trust Best Practices to receive an EPS.
   - Deliver 2,195 new single family homes with EPS through the New Homes Program. This is a 20 percent increase over the 2014 EPS unit goal.
   - Capture 26 percent of Energy Trust service territory new construction market.This is a three percent increase over the 2014 market share goal.
   - Continue to expand EPS awareness across the state to multiple levels of particapants including the homeowner.
   - Continue to support builder marketing opportunities through home tours and open houses.
   - Continue coordination with Existing Homes, SW Washinton New Homes, New Buildings, the Solar program, Earth Advantage and NW ENERGY STAR to leverage existing communication and support channels to deliver a consistent EPS message to customers.
   - Continue supporting Passive House, ENERGY STAR®, LEED® for Homes, and Earth Advantage® by helping verifiers to better understand and sell the benefits of each certification as it relates to EPS.
   - Promote Live Net Zero designation as a way to encourage builders to move to higher levels of efficiency to better market and sell their projects. Discover and support five Live Net Zero homes in 2015, which doubles the recognized LNZ homes in 2014
   - Support the verifier network through financial incentives and training as they become state certified Home Energy Assessors as a result of House Bill 2801.

2) Extend program reach by using innovative approaches to capture savings opportunities in new areas, both technical and demographic areas to reach the 74 percent of the market we do not currently serve.
   - Push standalone incentive offerings in Portland Metro and regional areas to supplement the gap where EPS is not feasible for a trade ally.
   - Work with affordable housing builders to determine new strategies to overcome initial barriers to participation.

- Continue to support affordable housing organizations such as Habitat for Humanity and community action programs.

- In 2015, begin a five year solar strategy that will incrementally deliver more solar projects and increase solar awareness.
  - Provide new solar support for builders to integrate solar ready and solar installations so they can make solar a standard option for home buyers by 2020.
  - Elevate market awareness of new construction solar options with increased solar field support and consumer marketing campaigns.
  - Provide new solar technical support to emphasize solar as a viable option for production homebuilders, that will increase incrementally over the next five years.
- Focus on new accessory dwellings and small homes in the Portland Metro area. Develop training and education for homeowners and real estate trade allies who pursue and promote these building types.
- Bring New Homes measures into builder-driven, small-rise multifamily new construction complexes.
  - Collaborate with New Buildings to identify and better serve builders who construct small-rise multifamily market.
  - Better serve allies that build both single family and multifamily homes.
- Continue to offer EPS incentive on major remodels and leverage these projects as a market to engage with contractors, customers, and perspective homebuyers and sellers around the benefits of EPS and high efficient construction.

3) Continue to collaborate with market actors such as home builder associations, builders, subcontractors and verifiers to prepare the market for the next building code change in 2017.

- Deliver a consistent message to the market by collaborating with industry stakeholders
  - Work with trade allies, NEEA, ENERGY STAR®, Earth Advantage, DEQ, BPA, and the state and local HBA offices across Oregon
- Support developers by leveraging Earth Advantage's existing framework of community engagement, allowing Energy Trust to gain savings, extended reach and market exposure.
- Train real estate allies by leveraging Earth Advantage's training materials to convey the value of EPS and efficiency to homebuyers, resulting in a recognized premium for the builder.
- Differentiate energy efficiency in home sales transactions by educating appraisers and lenders with a new appraisal addendum, training these new allies to recognize and value energy efficiency, lowering cost barriers for builders and homebuyers.
- Evolve codes and standards with NEEA, Energy Trust, Building Codes Division, EA, and OHBA.

- Identify the 2017 energy code options.
- Provide field trainings, support and incentives to subcontractors and builders, preparing them for the change and driving market transformation.

4) Refine and support the the Axis tool as the EPS delivery mechanism for verifiers with the goal of creating more efficient project throughputs, thereby achieving greater efficiencies in program delivery. The Axis database is an online cloud based portal developed by Pivotal Energy Solutions for the New Homes program. The platform allows verifiers to submit EPS program information directly into Axis which allows verifiers to receive and communicate real time feedback on new construction projects. This system enables builders, verifiers and realtors to make decisions about the efficiency of their home throughout construction and acts as a way to translate efficiency improvements to a potential homebuyer. The back end of Axis is linked to Energy Trust's payment systems which streamlined incentive processing by eliminating the need for the program to perform data entry, which is key to creating a scalable program.

    - Evaluate the need to add builder logins to Axis for better program visibility.
    - Provide modeling and Axis support to verifiers as the tool evolves.
    - Continue to streamline EPS delivery while maintaining data integrity.
    - Coordinate with the Northwest ENERGY STAR® homes program to identify improvements in Axis.
    - Work with the Existing Homes program, Oregon Department of Energy, Construction Contractors Board and other stakeholders to help communicate and implement the admistrative rules in House Bill 2801
    - Support Energy Trust marketing to update the EPS score sheet to accurately reflect the requirements of a home energy score, as outlined in the administrative rules in House Bill 2801.

- Provide a 2015 end of year assessment of the verifier market to identify a reasonable timeframe to reduce and phase out subsidies.
- Support standards such as Live Net Zero, NEEA Next Step Home, Passive House, Earth Advantage Net Zero, and solar opportunities.
- Quantify gas market transformation savings potential in new construction and assess new areas to create offerings. Identify the most valuable market segments and how to best engage the market to meet program goals.
- Explore and develop new measures and approaches to save energy through standalone incentives, trainings and education to capture missed savings and prepare contractors for the code change. Stand alones may include:
    - 95 percent furnaces with ECM

- Energy Recovery Ventilator
- Low Flow Showerheads
- Central Air Conditioners
- Fireplaces
- New measures evaluated in any 2015 pilots (such as HEMS)

- Continue to offer existing stand alones and evaluate their effectiveness in 2015
  - Heat Pump Water Heater
  - Ductless Heat Pump
  - Air Sealing
  - Gas Tank Water Heater
  - Alternative Waste Water Treatment
- Perform ongoing quality assurance through diagnostic testing, REM/Rate accuracy and continued coordination with third-party quality assurance inspectors to ensure accuracy of claimed savings.

5) Engage allies and homeowners through new marketing stratetgies, field training and simpler participation mechanisms

- Support ally business needs to give allies the opportunity to actively participate in marketing campaigns and provide them with tangible, practical ways to deliver high-quality homes to Oregon residents.
- Collaborate with Habitat for Humanity and builders to launch a social engagement campaign. The campaign will offer incentive redirects from builders to affordable housing projects and progam presence during consumer facings events to demonstrate Energy Trust's commitment to support affordable housing.
- Leverage relationships with realtors to distinguish and enhance the EPS home-buying experience.
- Increase awareness of EPS with homeowners that purchased an EPS home and show them how to maximize its benefits through a new homebuyer information basket.
- Continue to customize event and tour sponsorships to highlight EPS and Energy Trust.
- Continuie to promote Early Design Assistance with developers. Strengthen ties to developers to engage builders and designers early in the process, driving for deeper savings per home.

6) Broaden Participation By Underserved Customers:
   - Bring New Homes measures into builder-driven, small-rise multifamily new construction complexes. Collaborate with New Buildings to identify and better serve builders who construct small-rise multifamily market. Better serve allies that build both single family and multifamily homes.
   - Work with affordable housing agencies to support the need of projects on a slower construction schedule and longer budget cycle. Annual program budgeting for incentive levels creates uncertainty for affordable housing developers leveraging multiple financing streams and subsidy programs.
   - Grow the verifier network in areas that are either underserved or only have one option for verification. The program also aims to utilize both the eastern and southern Oregon Energy Trust representatives to increase our trade ally networks and program awareness in their territories.

7) Develop & Launch New Pilots:
   - Code Change Pilot - Earth Advantage will coordinate with OHBA and NEEA to identify new measures that are likely to be used in the upcoming code change then outreach, train and support non-participating program builder to prepare them for the code change. At the same time program builders will be targeted so they can make incremental increases in their energy performance through designated measures that will help them maintain their level of efficiency once the code changes. The pilot is testing the ability of builders to transform the market prior to code regulation.
   - Home Energy Monitoring Systems (HEMS)--As an offering to EPS home builders, New Homes will create qualifications and offer subsequent incentives for HEMS systems and devices that include the home's EPS. The incentive will allow builders to install HEMS devices of their choice from a Qualified Product List (QPL). The purpose of this offering is to determine the impact of using the EPS as a feedback mechanism to drive energy efficiency in the home, as well as to support builders in incorporating new, energy-saving devices in their houses
   - Program evaluations will be commissioned for each of the above noted pilots. A third evaluation is planned for program QA activities.

Key Assumptions:

- 20 percent growth in EPS unit counts and a three percent growth in EPS market share from 2014 to 2015.
- Successful outreach and engagement with at least three additional production builders.

- Approved blessing memos for new proposed measures, such as energy recovery ventilators, showerheads, central air conditioner stand alones, etc. and limited uptake during intial rollout for those measures that do get approved.
- Successful outreach and engagement with multifamily sector in order to realize project savings in 2015.
- Developers and builders will adopt an upstream incentive for incorporating energy efficiency standards into developments and/or subdivisions.

Risks or Challenges:

- ISIP II is a potential challenge for the New Home program since there will be a shift in the system that Axis points to. Coordination with Pivotal support staff and Energy Trust IT will be key to ensure that the transition goes smoothly.

- Slower than predicted housing market growth as indicated through the permit housing starts

- Loss of verifiers and subsequent builders due to the impacts of House Bill 2801. House Bill 2801 requires that anyone offering an home energy score in Oregon must be registered with the CCB and ODOE plus hold a $10,000 bond. The cost for registering and to hold a bond may deter some verifiers, especially those in rural areas or those who have low project volume, to continue being enrolled as a trade ally verifier. There is also a chance that the builders who previously worked with verifiers that have discontinued may not transfer to an active verifier. There is a strategic document that outlines the impacts of House Bill 2801 and the New Homes program's response and timeline.

- Preparing the market to transition to the new energy code.