Existing Homes

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Overview:

For 2013, key Program design components include achieving a high level of customer service while highly leveraging trade allies to achieve program goals. We will build on established relationships with current allies, market stakeholders and customers to achieve these goals. In broadening these relationships with allies, an enhanced customer experience will create a foundation for transitioning program tracks such as Home Performance with ENERGY STAR and Home Energy Reviews (HERs) to be more market driven.

Major modifications to the single family, prescriptive path include: developing a market—oriented and adopted quality control program, delivery of HERs by trade allies, expanding the trade ally delivery of instant saving measures (ISMs), increasing the lender ally integration and implementing strategies to reduce project costs while increasing savings. Additionally, we will begin reducing the portfolio level percentage of savings currently dependent on ISMs.

There are several challenges to address in 2013 to reach these goals. Including gas cost effectiveness constraints, federal standard changes in the lighting arena and the measure cost of home performance projects. Through the strategies outlined, a market driven quality control program, simplification of Home Performance with Energy Star project requirements, modifications to weatherization measure thresholds, continued support of the solar thermal market and water heater channels, and outreach to public owned utilities, will set the stage for Energy Trust to achieve its Existing Homes program goals.

Budget and Savings Overview:*

Achieve a total of 53,539,346 kWh and 1,242,814 therms.

- 45,509,346 kWh and 1,062,114 therm savings through the core program tracks;
- 8,030,000 kWh and 180,700 therm savings through behavioral efforts.

*Estimated numbers per round one of the 2013 budget process.

Round One Core Program Track Savings by Utility*

Utility	kWh	Therms
Cascade Natural Gas	-	72,047
NW Natural	-	990,067
Pacific Power	17,150,334	-
PGE	28,359,013	-
Core Programs Subtotal	**45,509,347**	**1,062,114**
Behavioral Savings (OPOWER)	**kWh**	**Therms**
Cascade Natural Gas	-	-
NW Natural	-	180,701
Pacific Power	2,400,000	-
PGE	5,630,000	-
Behavioral Subtotal	**8,030,000**	**180,701**
Overall Savings Totals	**53,539,347**	**1,242,815**

*Estimated numbers per round one of the 2013 budget process. Round two totals will be similar, but measure level savings distributions will reflect Fluid's strategy to move away from kit and directly installed instant savings measures. Savings by utility and measure category can be found in Appendix A.

Single-Family Prescriptive (Including Small Multi-Family)

Objective: Achieve savings of: 14,145,616 kWh and 375,568 therms.

- 2,806,903 kWh and 64,379 therms (Direct Install).

Goals:

- Assemble measure mix to achieve cost effective, verifiable energy savings, with flexibility to address changing market conditions.
- Implement gas weatherization pilots that meet requirements to improve savings without increasing installation cost.
- Guide customers to relevant resources and support, based on customer disposition, utility consumption, and housing characteristics to date.
- Increase Trade Ally engagement support through training, technology and analytic tools, and marketing support.

Goal: Assemble measure mix to achieve cost effectiveness, verifiable energy savings, with flexibility to address to changing market conditions.

Tactics:

- Transition measures and incentives to respond to changing market conditions and replace transforming measures.
    - Target homes with electric resistance heating to increase the number of ductless heat pumps installed in an effort to replace diminishing electric savings loss related to transformation of lighting standards.
    - Work with supply chain actors to support promotion and installation of efficient gas fireplaces to continue building this technology as a reliable gas savings measure.
- Develop promotion and delivery of water heater savings strategies, including ENERGY STAR gas tank, heat pump, and solar thermal installations through outreach and in collaboration with NEEA, supply chain, and trade allies.

- Increase customer awareness and improve accessibility to solar hot water heating measures.
- Continue outreach and coordination with distributors, retailers, and trade allies.

Goal: Implement gas weatherization pilots that meet requirements to improve savings without increasing installation cost.

- Develop and implement measure-level strategies to garner gas savings, with additional emphasis on rural markets, such as Cascade Natural Gas Territory.
  - Construct gas pilot plans (for prescriptive duct sealing and air sealing installation specification) by no later than March 1, 2013 and complete pilot by no later than December 31, 2013.
  - Implement augmented outreach and delivery approaches for rural markets (i.e., NE Oregon), with design elements unique to those regions and focused on resource acquisition.

Goal: Guide customers to relevant resources and support, based on customer disposition, energy consumption, and housing characteristics.

Tactics:

- Ensure under-served populations (i.e. rural communities, moderate income customers) have easy access to Energy Trust program offerings and financing.
- Extend the call center's hours to better serve customers.
- Proved a seamless path for connecting customers to access Trade Allies through referral options
- Develop marketing strategies that utilize the Energy Trust website and the call center to leverage housing characterization and addresses efficiency

opportunities for consumers purchasing existing homes and homeowners pursing remodeling improvements.

- Develop analytics including general data reviews looking at planned vs. actual savings assumptions, home characterization, and customer usage data (focusing on high consumption) to improve program design, develop targeted marketing, and increase savings per project.
- Continue to explore behavior savings strategies, including a test to measure the persistence of savings related to the 2011-12 OPOWER pilot with NW Natural and PGE customers, a potential pilot with PGE using Aclara; and potential to expand OPOWER efforts to a small set of Pacific Power electric heating customers.

Goal: Increase Trade Ally engagement support through training, technology with analytic tools, and marketing support.

- Provide simplified solutions for trade allies, including web forms for all program tracks, contractor referral codes and development of tools to increase trade ally visibility into their program activities and customers.
- Work with Market-Based Training Providers to develop enhanced training offerings, including mentoring, marketing, sales training, estimating, bidding, and project management.
- Continue collaboration with industry stakeholders (OHBA, HBA-MP, ORA, ORACCA, EAI, etc.) and aggregate outreach efforts to those organizations as well as additional organizations such as the Oregon Association of REALTORS®, PHCC, and ICCA.
- Integrate Trade Ally participation requirements into the rating system to further distinguish high-performing allies.

Risks:

- The proposed measure mix has been assembled to meet savings goals, cost and savings tests and is mapped to research and corresponding estimates on participation at the measure level. Significant changes in measure mix can result in reductions in savings and challenges in meeting 'tests.' While this will be mitigated through regular evaluation and correction, market conditions can exist where program implementation models have little control. In general, the Existing Homes portfolio offers great flexibility in managing measure mix. However, at the program track level, measure mix can be more limiting. For example, there are significantly fewer options for mobile home measure to make up savings where one measure under performs. (See appendix A for expected measure mix)

- Incentive reductions can affect participation levels. Targeting participant homes and addressing participation barriers will be critical in mitigation measure incentive reduction impacts.

Home Performance with Energy Star

Objective: Achieve savings of: 2,863,515 kWh and 233,114 therms (including CEWO).

- 1,068,771 kWh and 29,120 therms (Direct Install).

Goals:

- Achieve greater program savings while lowering costs for both Energy Trust and the consumer.
- Expand market-based support and responsibility of the Home Performance with ENERGY STAR track by focusing Program resources on industry collaboration and empowerment of trade allies and market actors.

Goal: Achieve greater program savings while lowering costs for both Energy Trust and the consumer.

- Utilize the new CRM system to enhance customer experience to maximize customer participation and investments in energy efficiency. By utilizing information captured in the CRM, customers can be directed and supported in the path that makes the most sense for them. For example, customers who are not eligible for weatherization measures will not be directed to in home energy reviews.
- Utilize analytics and home characterization approaches to deliver targeted marketing.
- Increase efficiency in home visits without compromising quality of customer service.
- Integrate water heating into home performance evaluation tools.
- Integrate direct installation of ISMs as a requirement for Home Performance Assessment incentives.
- Obtain market intelligence of customer barriers, needs and goals to inform program design improvements.
    - Utilize IT analytics to support simplifying the program design and delivery.
- Expand lender ally participation and increase promotion of financing products.
- Implement pilot delivery of EPS for existing homes through select Trade Allies, leveraging market actors to help convey and support its expansion. Market actors can use the EPS to incent action and reinforce the value of having taken action.

Goal: Expand market-based support and responsibility of the Home Performance with ENERGY STAR track by focusing Program resources on industry collaboration and empowerment of trade allies and market actors.

- Transfer more responsibility for program delivery to market actors (e.g., HP Guild, training providers, etc.) and the Trade Ally network.
- Use a series of roundtable discussions as an engagement tool to gain information from trade allies and to solicit their expertise in marketing the program.
- Engage the Home Performance Contractors Guild to gain their feedback and support and ensure effective program design and delivery.

Risks:

- The proposed measure mix has been assembled to meet savings goals, cost and savings tests and is mapped to research and corresponding estimates on participation at the measure level. Measure mix for HPwES will rely on HP contractors to understand and deliver to measure mix goals.
- Measure mix assumptions: potential for projects shifting toward less cost effective weatherization treatments.
- Value proposition to trade ally contractors will be on target with contractor support and appetite for improvements and change.

Savings Within Reach

Objective: Achieve savings of: 1,845,240 kWh and 40,876 therms.

- 875,652 kWh and 6,525 therms (Direct Install).

Goal: Increase overall participation in Savings within Reach by 5% from 2012 homes served.

- Implement financing options to increase customer participation.
    - Implement EEAST compliant Savings Within Reach on-bill repayment financing product.
    - Promote lending ally low interest loan products in conjunction with the on-bill repayment option.

- Work with community agencies and contractor representatives in each region to identify target opportunities and manage quality control.
    - Create efficient procedures to support agency referrals.
    - Work with HVAC distributers to co-market gas furnaces.
- Overcome perception barriers through outreach, marketing and call center customer engagement strategies.
    - Train call center staff to utilize key questions to identify and direct qualified customers.
    - Maintain SWR track loan products that are administratively simple and function as a streamlined component of current program infrastructure.

Risks:

- Slow economic recovery means that the maximum savings for this population are already being realized and there is no opportunity for increased savings from additional measures.
- Complications related to EEAST and implementing on-bill repayment.

Existing Mobile Homes

Objective: Achieve savings of: 5,398,051 kWh and 10,222 therms.

- 4,844,344 kWh and 8,960 therms (Direct Install-duct sealing and ISMs).

Goals:

- Implement new measures to replace existing measures that no longer meet cost effectiveness tests or increase existing measure effectiveness.
- Identify opportunities and target outreach efforts.

Goal: Implement new measures to replace existing measures that no longer meet cost-effectiveness tests or increase existing measures.

- Introduce ductless heat pump incentives for mobile homes.
- Introduce program requirements to control gaming of excessive cross duct installations.
- Improve program quality, customer service and reputation by adjusting program requirements, modifying trade ally participation agreements, and implementing batched quality control process.
- Manage partnerships with Community Action Partnership of Oregon (CAPO) to support quality control verifications in remote regions and increase coordination with low-income agency services.

Goal: Implement multiple strategies to identify opportunities and target outreach efforts.

- Update messaging targeting mobile home owners.
- Develop strategies through research and marketing to identify remaining opportunities in a saturated market.
- Effectively utilize contractors and other market actors to access participants.
- Host an initial contractor round table event for current mobile home trade allies to gain consistency across contractors and solicit ideas for improvement in program design and marketing ideas.

Risks:

- Existing market is more saturated than currently assessed.

Home Energy Reviews

Objective: Achieve savings of 3,508,274 kWh and 76,359 therms.

Goals:

- Ensure cost-effective delivery of in-home assessment through the installation of direct install instant savings measures.

- Identify, promote and facilitate consumer awareness and education of energy efficiency actions through online, phone and in-home Home Energy Reviews and provide education on measure payback.
- Utilize data collected from in-home assessments to support design concepts for targeted marketing and increased participation by the marketplace.

Goal: Ensure cost-effective delivery of in-home assessment through the installation of direct install instant savings measures.

- Install direct install instant savings measures during program led Home Energy Reviews.

Goal: Identify, promote and facilitate consumer awareness and education of energy efficiency actions through online, phone and in-home Home Energy Reviews and provide education on measure payback.

- Expand marketing and communication strategy to distinguish home assessment offerings and guide customers to the appropriate path.
- Utilize referral code mechanics to conduct competitions to drive traffic for on-line HERs with schools, community groups and employee engagements.
- Develop online resource to support customers in analyzing measure payback.

Goal: Utilize data collected from in-home assessments by contractors and program staff to support marketing strategies which increase participation in prescriptive home assessments by the marketplace.

- Define “snapshot” assessment protocol and incentive structure, deliver trainings, and implement tools for consistent data collection during in-home assessments.

- Use contractor trainings, roundtables, and outreach events to inform contractors to use the HER as a targeted customer engagement tool.

Risks:

- Contractors will find the "snapshot" assessment process too cumbersome and time consuming and the incentive payment not sufficient.

Energy Saver Kits, Living Wise school kits, and Direct Install*

Objective: Achieve total savings of 17,472,651 kWh and 317,194 therms:

- 16,182,764 kWh and 237,460 therms (Energy Saver Kits).
- 1,289,887 kWh and 79,734 therms (Living Wise Kits).

*Direct install savings captured within Prescriptive, Home Performance and Manufactured Homes sections.

Goals:

- Utilize kits as a key engagement tool to encourage customers to make energy saving improvements.
- Balance 'engagement strategy' with a desire to transition program away from dependency on Energy Saver Kits as a significant savings lever.
- Transition direct install activities to allies.

Goal: Utilize kits as a key engagement tool to encourage customers to make energy saving improvements.

- Shift school kits from student delivery to an outreach approach that drives consumers to customer engagement strategies and to order an Energy Saver Kit from Energy Trust's website.

- Integrate "housing characteristics" data capture points to the kit fulfillment form and improved functionality aimed at increasing realization rates of kits.
- Use data to deliver targeted messaging in kit inserts containing additional measures and behavioral actions relevant to each recipient's specific energy needs.

Goal: Balance 'engagement strategy' with a desire to transition program away from dependency on Energy Saver Kits as a significant savings lever.

- Establish progressive change over time.

Goal: Increase participation of direct install activities by allies.

- Create mechanisms for trade allies to easily access ISMs: through consignment and bulk purchasing.
- Establish an ISM product inventory management system, including consignment agreement and invoicing with trade allies who participate in direct installation of products.
- Educate trade allies on installation methods and best practices for direct installation.

Risks:

- Increased demand for instant savings measures.
- Slow or no uptake in trade ally adoption of direct install work.
- Slow to no uptake in adoption of additional measures from kit marketing.
- Gas cost effectiveness outcomes from OPUC.
- Parents don't order Energy Saver Kits – loss of savings by students not carrying home a kit.

Public Utility District

**Objective: ***Savings goals are embedded in Home Energy Review and Kits.

Goal: Implement partnerships with Publically Owned Utilities in Oregon to increase overall gas savings achieved in territories with overlap.

- Establish processes and protocols between the Publicly Owned Utilities in Oregon and Energy Trust that facilitates coordinated approaches to: market engagement, incentive structures, program requirements and documentation.
- Develop audience-centric messages that target dual-fuel households.
- Offer existing program measures to collaborate with PUDs on implementing and increasing energy saving awareness for their customers

Risks:

- Market fragmentation- no universal approach to energy savings among Oregon POUs.
- Oregon POUs are not interested in working with Energy Trust of Oregon.

Solar Hot Water Heating

Objective: Achieve savings of 276,000 kWh and 8,780 therms.

Goal: Reduce electric and gas consumption by increasing uptake in solar water heating technologies.

- Implement measure strategies for solar water and pool heating by leveraging existing market data on housing characteristics.
- Message to the installation community the enhancements made in 2012 to simplify the installation requirements, approve new systems that are lower in cost, and that field installation assistance is available through the program.
- Consider promotions and or bonuses to spur action in this area as 2013 is a year that the program needs to demonstrate viability of solar thermal to maintain its existence as a measure supported by Energy Trust.

- Integrate solar water heating into home performance evaluation tools.
- Integrate solar water heating into home performance messaging.
- Increase the number of active solar water heating TA contractors. Drive new contractors to participate in program supported technical trainings.
- Develop strategies to increase partnerships between home performance contractors and solar water heating contractors.

Risks:

- We are attempting to increased program activity while reducing the incentives for customers with gas backup water heaters by 40%. Justification for increased activity is based on new, lower cost products coming to market and removing costly barriers to program participation.

Appendix A: Savings Breakdown by Utility Measure Class

Savings by measure category reflect round one of the 2013 budget process. Round two saving totals will be similar, but measure level saving distributions will reflect Fluid's strategy to move away from overreliance on kit and directly installed ISM measures.

Table 1: Pacific Power

Measure Class	Measure Category	kWh	Percent of Total
Direct Installs	CFLs	1,474,713	9%
Direct Installs	Faucet Aerators	1,699,518	10%
Direct Installs	Showerheads	2,529,076	15%
Hot Water	Heat Pump Water Heater	180,950	1%
Hot Water	Tanked Water Heaters	10,058	0%
HVAC	Commissioning	208,690	1%
HVAC	Ductless Heat Pump	2,456,300	14%
HVAC	Heat Pump Replacement	581,877	3%
HVAC	Heat Pump Upgrade	408,124	2%
HVAC	Pump Advanced Controls	30,204	0%
Kits	Energy Saver Kits	5,510,924	32%
Kits	Living Wise Kits	690,394	4%
Solar	Solar Hot Water	143,649	1%
Weatherization	Air Sealing	156,372	1%
Weatherization	Ceiling Insulation	236,646	1%
Weatherization	Duct Insulation	28,611	0%
Weatherization	Duct Sealing	410,851	2%
Weatherization	Floor Insulation	248,362	1%
Weatherization	Knee Wall Insulation	5,388	0%
Weatherization	Wall Insulation	90,849	1%
Weatherization	Windows	48,778	0%
Total		**17,150,334**	**100%**

Table 2: PGE

Measure Class	Measure Category	kWh	Percent of Total
Direct Installs	CFLs	2,257,871	8%
Direct Installs	Faucet Aerators	1,188,320	4%
Direct Installs	Showerheads	3,811,106	13%
Hot Water	Heat Pump Water Heater	446,325	2%
Hot Water	Tanked Water Heaters	48,679	0%
HVAC	Commissioning	276,582	1%
HVAC	Ductless Heat Pump	5,028,100	18%
HVAC	Heat Pump Replacement	889,061	3%
HVAC	Heat Pump Upgrade	494,871	2%
HVAC	Pump Advanced Controls	5,518	0%
Kits	Energy Saver Kits	10,671,840	38%
Kits	Living Wise Kits	771,146	3%
Solar	Solar Hot Water	116,193	0%
Weatherization	Air Sealing	379,643	1%
Weatherization	Ceiling Insulation	456,699	2%
Weatherization	Duct Insulation	248,804	1%
Weatherization	Duct Sealing	267,104	1%
Weatherization	Floor Insulation	594,990	2%
Weatherization	Knee Wall Insulation	14,849	0%
Weatherization	Wall Insulation	306,218	1%
Weatherization	Windows	85,094	0%
Total		**28,359,013**	**100%**

Table 3: NW Natural

Measure Class	Measure Category	Therms	Percent of Total
Direct Installs	Faucet Aerators	42,495	4%
Direct Installs	Showerheads	113,215	11%
Hot Water	Tanked Water Heaters	42,046	4%
Hot Water	Water Heater Setbacks	6,518	1%
HVAC	Boiler	2,753	0%
HVAC	Direct Vent Gas Heater	163	0%
HVAC	Gas Furnace	565	0%
HVAC	Gas Hearths	99,134	10%
Kits	Energy Saver Kits	224,489	23%
Kits	Living Wise Kits	80,340	8%
Solar	Solar Hot Water	9,384	1%
Weatherization	Air Sealing	44,281	4%
Weatherization	Ceiling Insulation	101,563	10%
Weatherization	Duct Insulation	20,638	2%
Weatherization	Duct Sealing	13,987	1%
Weatherization	Floor Insulation	45,575	5%
Weatherization	Knee Wall Insulation	2,756	0%
Weatherization	Wall Insulation	81,344	8%
Weatherization	Windows	58,821	6%
Total		**990,067**	**100%**

Table 4: Cascade Natural Gas

Measure Class	Measure Category	Therms	Percent of Total
Direct Installs	Faucet Aerators	6,104	8%
Direct Installs	Showerheads	12,716	18%
Hot Water	Tanked Water Heaters	3,286	5%
Hot Water	Water Heater Setbacks	326	0%
HVAC	Gas Hearths	11,392	16%
Kits	Energy Saver Kits	12,972	18%
Kits	Living Wise Kits	1,788	2%
Solar	Solar Hot Water	1,040	1%
Weatherization	Air Sealing	1,954	3%
Weatherization	Ceiling Insulation	4,548	6%
Weatherization	Duct Insulation	1,444	2%
Weatherization	Duct Sealing	7,113	10%
Weatherization	Floor Insulation	2,385	3%
Weatherization	Knee Wall Insulation	40	0%
Weatherization	Wall Insulation	1,448	2%
Weatherization	Windows	3,493	5%
Total		**72,047**	**100%**