



Spotlight on Maine: Transition to a Sustainable Level of Incentives

Key Takeaways

- Maintain a base level of demand in the absence of rebates by providing multiple customer financing options
- Create a sense of urgency and drive customer demand with incentive deadlines
- Design incentives to achieve specific goals

Since 2002, Efficiency Maine has offered a variety of energy efficiency programs that have been funded through system benefit charges, American Recovery and Reinvestment Act (Recovery Act) funds, and Regional Greenhouse Gas Initiative revenues. Since January 2010, more than 3,200 Maine households have completed energy upgrades through Efficiency Maine's Home Energy Savings Program (HESP). Launched as a rebate program in 2010 to drive early consumer and contractor awareness and participation, Efficiency Maine's HESP is one of the few large residential energy efficiency programs that have attempted to navigate the transition from rebate-focused offerings to financing-focused offerings that better align with its limited budget.¹

Program participation has declined since rebate funds were exhausted in 2011, but the introduction of Maine's PACE loan program in April 2011 and the U.S. Department of Housing and Urban Development's PowerSaver loan program in 2012 have helped to maintain a consistent level of consumer demand and contractor activity. In addition, Efficiency Maine recently introduced modest new incentives strategically targeted at achieving specific objectives, including improving assessment-to-upgrade conversion rates, ensuring quality work, and improving program data collection.

Use Incentives and Limited-Time Offers to Drive Program Awareness and Adoption

After receiving a \$10 million U.S. Energy Department State Energy Program (SEP) Recovery Act grant in 2009, Efficiency Maine program managers designed residential energy upgrade incentives to encourage energy savings. Efficiency Maine offered customers a rebate for 30% of project costs, which could total up to \$1,500 for comprehensive projects that were projected to achieve at least 25% energy savings. The maximum incentive level was increased to \$3,000 for deeper projects that achieved at least 50% savings.

Efficiency Maine expected that these incentives would both drive consumer demand for energy improvements and stimulate contractors' interest in adapting their business models to accommodate whole-house energy improvements; however, early program participation by both contractors and homeowners was low. To further motivate consumer and contractor action, Efficiency Maine launched an additional, limited-time \$1,000 summer bonus incentive in June 2010. This incentive expired at the end of September 2010 and was available to participants at both the 25% and 50% savings threshold.

"The limited-time offer was key to moving people to action, and the bonus seemed to cross a threshold that motivated contractors to get into the game," said Dana Fischer, Efficiency Maine's residential program manager. "When incentives were subsequently reduced back to the original levels, contractors were able to keep their volumes above pre-bonus levels." (See Figure 1.)



The Better Buildings Neighborhood Program is a U.S. Energy Department program that is improving lives and communities across the country through energy efficiency.

To learn how the Better Buildings Neighborhood Program is making homes more comfortable and businesses more successful and to read more from this Spotlight series, visit betterbuildings.energy.gov/neighborhoods.

¹ Financing may reduce program costs per energy upgrade relative to rebates. In the face of limited budgets, some programs are pursuing financing-only initiatives to reduce their costs; however, many questions remain as to the level of program costs necessary to support financing-only initiatives and the capacity of financing-only programs to drive customer participation.

Understand Customer Motivations Beyond Incentives

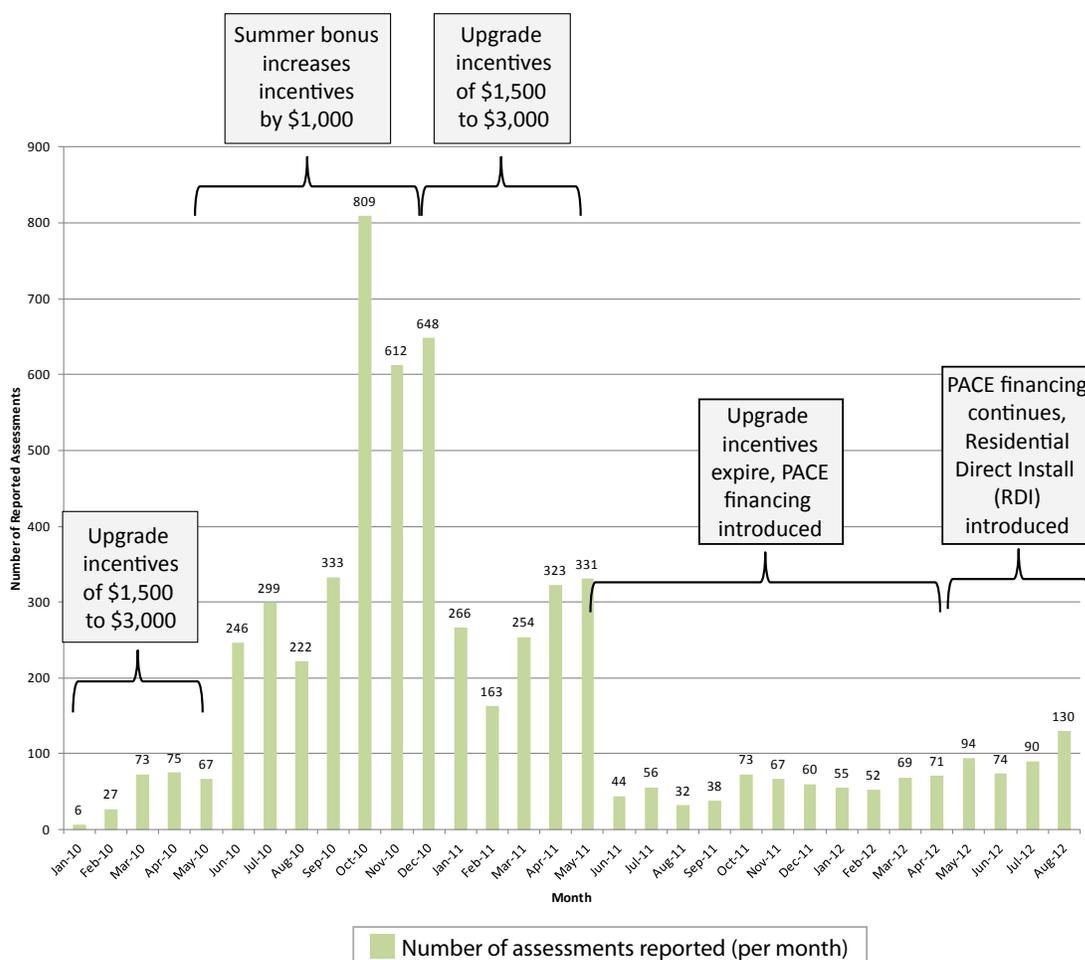
Efficiency Maine program managers have found that beyond a certain incentive threshold, other customer motivations for pursuing energy upgrades—or choosing not to—come into play. Early program participants tended to live in oil-heated homes with higher-than-average energy bills. Although approximately 70% of Maine homes are oil-heated, 85% of Efficiency Maine program participants live in oil-heated homes. Average annual home heating oil consumption in the state is nearly 800 gallons, but early participants averaged approximately 1,000 gallons per year before completing an upgrade.

The state’s largest utility, Unitil, used system benefit charge monies to offer enhanced incentives for its gas customers.² Although Unitil

offered a rebate of 50% of project costs compared to Efficiency Maine’s rebate of 30% of project costs, Unitil’s grant funds did not fly out the door.

Program managers concluded that the lack of interest in these enhanced rebates indicated a declining marginal demand for rebates as the rebate amount increased, i.e., for each increase in rebate amount, increases in demand shrank. Natural gas prices have declined in recent years, so Maine’s gas customers have lower energy bills than the state’s oil customers and are less motivated than these oil customers to pursue energy efficiency to save money. In many parts of the country, home comfort concerns or addressing deferred maintenance may be major customer motivators to pursue energy upgrades, but in Maine, evidence shows that the high price of oil is often the predominant driver.

Figure 1: Home Energy Assessments Reported to Efficiency Maine (January 2010 to August 2012)³



Note: While project volume is certainly lower in the absence of rebates, this chart may overstate the decline. One reason for the lower number of reported assessments is that, in the absence of rebates, some comprehensive projects that are not being financed through program products are not being reported to Efficiency Maine.

² Approximately 7% of Maine’s residential buildings are served by natural gas utilities.

³ Program managers suggest that assessment-to-upgrade conversion rates remained strong (above 50%) throughout this period. Upgrades are not included in this figure because contractor reporting was heavily concentrated at the end of rebate eligibility periods, i.e., work done in preceding months was reported at the deadline.

Plan for a Smooth Transition From Rebates to Financing

In addition to the SEP grant, the Energy Department awarded Efficiency Maine \$30 million in Recovery Act funds through the Better Buildings Neighborhood Program in June 2010. The grant was targeted at supporting a statewide residential energy efficiency financing program. As the SEP rebate monies wound down in spring 2011, Efficiency Maine planned a transition period during which customers could qualify for both rebates and financing. This transition period lasted for just one month, as customer rebate demand was higher than expected in the lead up to the transition. While several contractors feared that customer demand would plummet without rebates and threatened to discontinue home performance work, Efficiency Maine held firm on its plan and encouraged contractors to adjust their business models to the “post-rebate reality.”

Efficiency Maine aggressively positioned its messaging to contractors, homeowners, and other stakeholders in the months leading up to the rebate expiration. “We focused on preparing contractors and customers for this transition. We told them with certainty that rebates will be gone and will not be coming back, but that Efficiency Maine is committed to this program,” Fischer said. “While a number of contractors were unhappy, our clear communication helped to build their confidence that we will be there in the long term to support this market. In addition, we communicated to customers that there is now a strong service delivery framework in place and there has never been a better time to get this work done.”

Customer demand dropped after the rebates ended, and there has been attrition among smaller, less experienced contractors; however, the most successful contractors maintained consistent workloads, and new firms continue to enter the market. Fischer suggested that the availability and promotion of financing products appears to both enable upgrades and drive customer demand, albeit at significantly lower levels. “People hear that weatherization is cash-flow positive with lending and that weatherization can pay for itself...then people decide whether they are inclined to use our financing, or other financing, or pay out of pocket from there,” Fischer said.

Change Upgrade Patterns by Shifting Program Offers

While overall program demand has reduced, the shift from incentives to financing had more nuanced impacts on the program, affecting project sizes and the types of households participating. For those homeowners paying for projects out of pocket instead of using financing, the average project size declined since the rebates were phased out. More than 50% of program participants as of mid-2012 have been baby boomers getting ready to retire—they have nest

eggs and want to retire comfortably. Part of this comfort means ensuring they can afford their future utility bills. According to Efficiency Maine staff, these homeowners are generally comfortable spending a fixed amount of money (e.g., \$5,000) from their savings to achieve this security. With the availability of HESP incentives, this nest egg investment was buying the baby boomers larger projects (e.g., \$6,500 to \$8,000 projects), but since the rebates expired, the average cost of projects that are not financed has declined to about \$5,000. This effect is significant, as program managers estimate that 80% of energy improvements occurring in the state are not being financed today.

For projects being financed, however, project sizes have increased dramatically. More than 50% of financed projects are at the maximum borrowing level for the program’s two loan products (\$15,000 for PACE loans and \$25,000 for HUD PowerSaver loans). Very few projects are being financed at the program’s previous typical upgrade size (e.g., \$7,500 to \$8,500), and the projects below \$7,500 are generally paid directly by the homeowner.

In addition to changes in scope of projects being completed, Fischer suggested, financing has increased the accessibility of energy improvements to a larger portion of the state’s population. When rebates were available, program participants tended to be those with incomes in the top 20% of the state’s households. With financing available, Efficiency Maine is seeing participation expand to households with slightly lower incomes—those in the top 35%—suggesting that some of these lower-income households are participating in the financing program because they lacked the up-front capital to take advantage of Efficiency Maine’s initial rebate offerings. Still, this leaves a significant portion of the population—in many cases those that can most benefit from these improvements—underserved by Efficiency Maine’s existing offerings because they do not qualify for the financing products.

Design Incentive Programs to Meet Program Objectives

According to Fischer, designing the appropriate incentive level for programs is often as much art as science. “The incentive needs to be high enough to make something happen, but you need to understand what it is that you actually want to have happen. If you’re just offering 30% of the cost of a project, there are all kinds of things that you may or may not be incentivizing. Understanding your objective in offering an incentive helps to sort through how rich your incentives should be and how to structure them,” he said.

Applying this philosophy, Efficiency Maine launched a new incentive program, the Residential Direct Install (RDI) Initiative, in April 2012. The initiative has several goals:

- Motivate and enable homeowners to move beyond getting the required energy assessment

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–Dana Fischer,
Efficiency Maine

- Encourage best practice test-out assessments to ensure quality work after the project is complete
- Improve Efficiency Maine’s ability to capture data on the work being done state-wide that is currently not being reported to the program (e.g., projects that are not financed often are not reported)

The RDI Initiative offers contractors \$300 for conducting a minimum of six hours of blower door-driven air sealing and insulation work, which Efficiency Maine expects will often be part of a larger project. Through RDI, the program offers an additional \$100 project completion incentive on projects that are either financed through Efficiency Maine loan products or for which contractors submit a test-out assessment demonstrating at least 20% savings.

In designing the incentive, program managers looked at the costs of contractor service delivery and determined that with a market labor rate of approximately \$50 per hour, the \$300 incentive would cover the labor costs of a six-hour assessment or six hours of direct installation work which is in line with the average cost customers are charged for assessments. While Efficiency Maine has not specified exactly how contractors should build this incentive into their offers to customers, participating homeowners do have to sign an incentive release form so they are aware that the contractor is receiving an incentive.

Program managers anticipate that most contractors will pass this incentive on to customers and that it might help to overcome the hurdle posed by the up-front cost of energy assessments. If homeowners are getting tangible, direct install improvements in return for their initial assessment investment, they might be more motivated to complete upgrades after the assessment.

Questions remain about whether the RDI Initiative will improve assessment-to-upgrade conversion rates, or cannibalize existing demand for more comprehensive work, and whether contractors will market it aggressively and report their projects more frequently. While it is too early to assess how successful RDI will be, Efficiency Maine has quietly launched the program to test whether the incentives are achieving program objectives before it is rolled out more aggressively.



Maine

Program Accomplishments

From October 2010 through March 2012

Home energy assessments completed: 3,598

Home energy upgrades completed: 1,949

Home loans provided: 198 (with a value of nearly \$2.3 million)

For More Information

Efficiency Maine
www.energymaine.com

Efficiency Maine

Efficiency Maine is an independent trust dedicated to promoting the efficient and cost-effective use of energy in order to save money for Maine residents and businesses, grow the economy, and create jobs. Established in 2002, Efficiency Maine is primarily funded through the system benefit charge included in electricity rates, as well as the Regional Greenhouse Gas Initiative and various other funding sources.⁴

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⁴ Efficiency Maine was formed as a result of “An Act to Strengthen Energy Conservation” by the State Legislature in 2002. www.energymaine.com/faqs