

Residential Air Sealing Program Drives Maine Home Energy Savings Through the Roof

Better Buildings Neighborhood Program partner Efficiency Maine launched a statewide Residential Direct Install (RDI) program in 2012 to help drive demand for both energy assessments and upgrades. The program offered a \$600 rebate to homeowners who completed an energy assessment and at least six hours of air sealing work. The incentives succeeded, with contractors making measurable energy improvements in 8,000 houses in 12 months. Of the homes that completed air sealing, 20% went on to commit to deeper upgrades. Following is an abridged transcript of an interview with Dana Fischer, Efficiency Maine's residential program manager, about the RDI program.

What made you consider introducing the direct install model?

In spring 2012, we were getting ready to transition our program from a model that focused on rebates and no financing to one with all financing and no rebates. We were also looking for a way to keep the workforce engaged during this time. One way to stimulate the uptake of financing and ensure ongoing work for our contractors was by increasing demand for energy assessments, but since assessments alone don't always generate energy savings, we wanted to help homeowners go one step further and undertake some measures to save energy.

What were your goals for the program?

We wanted to make sure that we were increasing energy savings while also increasing the number of households acting on their assessments. For us, this meant engaging owners of one-to-four-unit residential properties by helping them to learn firsthand about both energy assessments and the types of improvements needed in their home. We assumed that if they had a positive experience with a contractor and found out how much money they could save, that would increase the volume of larger projects across the state and stimulate loan activity.

How did the RDI program work? What types of improvements were included?

The types of direct install measures depended upon what the contractors found in an individual home. We suggested what they prioritize, but the only requirement was having a minimum of six hours of air sealing work done, as well as pre- and post-installation blower door tests. Besides air sealing, other RDI measures could include insulating foundation sills, insulating piping, programmable thermostats, tank wrap, and water-efficient showerheads. Homeowners who used one of our BPI-certified contractors for an energy assessment and a minimum six hours of air sealing work would get \$600 off their invoices.



How did you determine the right level of incentives to offer?

We started with the incentive level at \$300 for the assessment plus six hours of air sealing work, but the uptake was anemic. We were told \$300 was not enough to make it worth the contractors' time getting to and from the job site. The program really took off when we raised it to a \$600 rebate. Among the 8,000 units that we upgraded in our RDI program, the average total project cost was about \$850. The contractors took the rebate directly off of their invoice, so the homeowner would typically chip in around \$250.

We recently lowered our incentive level to a \$400 rebate with a \$200 minimum contribution from homeowners and linked the RDI with a comprehensive suite of incentives and financing. This allows us to promote all aspects of home energy improvements, including insulation and heating system upgrades. The total cost of a typical air seal and assessment project is still around \$850, but the homeowner is now paying \$450. Although the new program design is only a few months old, the change in program design and marketing priorities has significantly slowed down the air sealing work. As a program, we're trying to see what the implications are and what might be the best options for increasing the air sealing and assessment work.

What improvements did homeowners see as a result of the direct installs?

It was really pretty dramatic; in the course of six to 10 hours, contractors were on average reducing the air flow by 17% in each home. According to our program evaluation [report](#), the total net annual energy savings were 13.5% of pre-project, whole-house energy usage. In Maine, where a majority of homes are oil-heated, that meant homeowners saved around \$300 in fuel oil costs per year. If you think about us putting up \$600 and the homeowner putting up \$250 for measures that are going to last for decades, it's incredibly cost-effective.

What kinds of marketing did you use to drive demand for this service?

We spent \$30,000 or \$40,000 on radio advertising over the course of three or four months. We also placed Web banner ads, print ads, and movie theater ads. Demand became so rampant, however, that we basically backed off of all marketing. Most of what occurred after that was due to contractors marketing the program themselves and word-of-mouth referrals. Homeowners would get this service; their house would become tighter; and they'd be so excited about it that they would talk to friends and neighbors, transitioning into this incredible phenomenon of referrals. Interestingly, we also saw higher-than-expected pockets of activity in certain parts of the state simply because those areas had really active contractors.

What did you do to encourage deeper upgrades for direct install customers?



We saw a new strategy in the marketplace, where contractors would show up with a crew for the assessment and six hours of air sealing, take care of everything they could, and leave the homeowner with a prioritized list of upgrades for their house. That way, in addition to receiving air sealing and an energy evaluation, the homeowner becomes more familiar with both contractors and the energy upgrade process. If the contractor provided good customer service, it's an automatic lead. Some contractors saw between 50% and 70% of their projects transition into larger ones.

We also initiated an outbound call campaign from our call center, during which we asked homeowners about their experience and informed them about additional incentives and loans. Some homeowners applied for loans right there on the phone.

How do you plan to continue engaging homeowners and make the program sustainable?

We're launching a postcard campaign that involves splicing all the information we got from the 8,000 RDI program participants into categories, such as homes that need insulation or have high heating costs. We plan to send them customized postcards congratulating them on taking the first step to a high-performance house and adding that we have financing and additional incentives available for further projects specific to their needs.

What advice would you give other programs interested in trying a direct install approach?

- ▶ Consider the appropriate contribution level from homeowners. The program really took off when we raised the incentive level, but since we lowered our incentive level and integrated it into a more comprehensive home energy upgrade (including heating systems), the volume of RDI activity has fallen disproportionately. You may need to experiment to find the “sweet spot” that balances what the critical mass of customers is willing to pay while preserving your funding, promoting market transformation, and encouraging deeper retrofits.
- ▶ Realize that a lot of homeowners take the energy upgrade process in stages. Even though we didn’t see a significant increase in loan volume at first, those people that went through the program are more likely to engage in these projects or get loans in the future as a result of their RDI participation.
- ▶ Think twice about taking reservations. Our program was first come, first served, and available for a limited time, which seems to have encouraged people to act quickly.
- ▶ Issue payments directly to contractors. Paperwork will come in faster because contractors don’t want to float the project costs any longer than necessary. This eliminates potential delays with homeowners learning how to find or fill out the forms, as the contractors simply bring the paperwork to the program and get the necessary signatures. It’s about aligning the interests of the consumers and the contractors, and making the process easy.
- ▶ Think about how to help your program be self-sustaining in the long term. The fact that we had thousands of homeowners getting involved in air sealing and receiving benefits from this project clearly increased the visibility of the program with the general public, as well as with policy makers. Incidentally, in the midst of our air sealing program activity in 2013, the state legislature unanimously passed a sweeping bill allocating more revenue to energy efficiency and weatherization initiatives across the state.

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