



Twin Cities One Stop Program

Making the Best of Your Only Shot at Reaching Homeowners

Minneapolis and Saint Paul have developed a model for delivering home energy-improvement services that reduces marketing costs for programs and transaction costs for homeowners. By delivering energy efficiency education, subsidized energy assessments, and home energy-improvement services to many homes in a single neighborhood at once, the Twin Cities One Stop Program reduces barriers that have led to low participation in residential programs. The program's coalition of cities, nonprofits, and utilities works from the notion that homeowners are more likely to make a major investment if they have been directly involved in learning and taking a few small steps first. The program's Home Energy Squads have visited 1,800 homes and for each delivered typically 10% to 15% energy-use reductions. All participating homes are served at a cost of ~\$600, of which the homeowner pays \$30. The pilot is collecting information about what motivates homeowners to invest in energy efficiency, who should sit at the kitchen counter to "seal the deal," and how to reduce overall program costs.

Background

In June 2009, a coalition led by the cities of Minneapolis and St. Paul made a pledge to upgrade 50% of the cities' buildings in 10 years. The cities partnered with the Center for Energy and Environment (CEE)¹ and the Neighborhood Energy Connection (NEC)² to design an integrated residential energy-efficiency program. The coalition chose to focus program resources on the residential sector because of historical difficulty in achieving substantial participation and energy savings through these efforts. Carl Nelson, CEE's Minneapolis program manager explains: "Sure, the savings you can achieve in commercial or industrial buildings dwarf what you can achieve in residential buildings. But it's not an either/or situation. We are going to need extensive efficiency improvements everywhere to meet our targets for reductions in energy use and climate emissions."

The pilot program was launched in fall 2009. Twelve demographically diverse neighborhoods, seven in Minneapolis and five in St. Paul, were selected. Program funding came from two utilities and the state lottery.

Program Design

According to staff, the Twin Cities One Stop Program involves several insights and well-defined steps.

Step #1: Pick a Target Neighborhood. Targeting selected neighborhoods with a package of outreach and service-delivery methods is critical to ramping up the number of homes being retrofitted and ensuring that administrative costs are kept to a minimum.

¹ The Center for Energy and Environment is a state-wide nonprofit with a forty year track record of delivering energy conservation and efficiency programs.

² The Neighborhood Energy Connection is a St. Paul-based nonprofit with a mission to reduce pollution, conserve resources and improve quality of life by offering tools for energy efficient living.



Step #2: Invite the Homeowner to a Free Workshop. CEE staff said past experience showed that free workshops pique the interest of homeowners and persuade them to schedule a home visit. Workshops are a safe first step for a homeowner to take, much easier than inviting a stranger into their homes.

Participating communities in Minneapolis and St. Paul have used different strategies to conduct outreach about the free workshops. These range from door-to-door visits to newspaper articles and advertisements. During the workshop, participants receive basic information about improving energy efficiency, and free devices they can install at home, such as CFLs and faucet aerators. Attendees also become eligible for a subsidized home visit scheduled shortly after the workshop, and in Minneapolis, over 95% of homeowners attending workshops pay the \$30 to sign up for the home visit.

Step #3: Send in the “Home Energy Squad.” A central element of the Twin Cities pilot program is a home visit conducted by a “Home Energy Squad.” The squads are designed to provide homeowners with new information and the chance to make small energy improvements immediately. While a squad member performs a blower door test to determine the necessity of major air sealing and insulation work, the rest of the squad does a home walk-through with the property owners, showing them what they can do to save energy. Some improvements are made on the spot, such as replacing light bulbs, wrapping water heaters with fiberglass blankets, and weather-stripping doors. Homeowners learn by doing, and squad members tell them what more they can do, and are educated about steps they can take in the future. Home visits are scheduled so energy squads can perform many in the same neighborhood on the same day. The goal is to keep the whole visit to 90 minutes. The homeowner has virtually no cost: just \$30 for a home visit valued at \$400, provided as a subsidy by the program.

These squads are funded by the area’s two utilities, Xcel Energy and CenterPoint Energy, as part of their Demand Side Management programs. The funding covers only the on-the-spot improvements and does not include a blower door test or other diagnostics. However, in order to deliver a comprehensive program and increase program effectiveness, CEE raised funds to conduct blower door testing and other critical diagnostic measures. In St. Paul, the NEC has a separate utility contract to provide comprehensive home energy assessments, so diagnostics are performed in a separate visit and can be targeted at households most willing to make major improvements.

Step #4: Assess the Need for Deeper Investments, and Make the Pitch.

If the blower door test shows that a home would benefit from major energy-efficiency investments, the Home Energy Squad closes the visit by trying to bring the homeowner as close as possible to a decision to move forward. Squad members offer assistance in locating skilled contractors. The squad explains that energy improvement investments are not as hard as homeowners may think by providing cost ranges and by exploring financing options to eliminate



or reduce up-front costs.³ In practice, this is the biggest challenge, and the piece that will need the most refinement over time. Squads will eventually be equipped with laptops so they can print out reports with key recommendations, such as improving insulation and air sealing – on the spot.

Step 5: Follow-up and feedback.

The programs provide assistance for homeowners interested in completing major upgrades. This includes both consultation and financing (both CEE and NEC have loan officers on staff that can provide a range of financing options to customers). A Home Energy Progress report is sent bi-monthly to encourage better energy-consumption habits. This report tracks homeowner's energy usage against average use in similar homes, as well as individual targets.

Program Design Motivations

The design of the Twin Cities One Stop program was focused on three ideas:

Go Systematically, Neighborhood by Neighborhood. The pilot program aims to motivate entire neighborhoods to complete upgrades at the same time. Twin Cities One Stop staffers say it is extremely expensive responding to individual homeowners who call a hotline or fill out a web-based form. Home energy Squads visit many homes in an area on the same day to cut back on mobilization costs without sacrificing service provision.

Focus on Motivating Homeowners , Not Just “Educating” Them Many traditional assessment programs are premised on the theory that more information will lead to more action; however, it has been well established that information alone does not necessarily prompt people to make significant changes. Therefore, the Twin Cities pilot utilizes behavioral strategies, such as walking homeowners through the first small steps to move them toward pursuing more expensive but effective opportunities for improving efficiency.

Do As Much As Possible in “One Stop.” It is cheaper to visit a home only once, and it is never certain that a second visit is possible. The Twin Cities pilot is designed to accomplish multiple tasks in a single home visit. The crew conducts diagnostic testing of the home, installs simple efficiency technologies, educates the homeowner on the benefits of efficiency improvements, and makes recommendations for additional efficiency upgrades based on diagnostic testing results. The coalition believes that homeowners are most likely to make a major investment if they have been directly involved in learning and taking a few small steps first.

Lessons for Driving Demand

Customize Outreach Approach for Each City and Neighborhood

The Twin Cities coalition designed for flexible outreach approaches. “The core strategy is connecting with neighborhood leaders and getting those people behind you,” says Anne Kraft, a

³ Both organizations maintain a list of contractors that meet their standards.



Product Developer at Xcel Energy who is working with the coalition. “The strategy for exactly how to do that looks a little different for each neighborhood.”

In Minneapolis, CEE issued a Request for Proposals to locate prospective community partners. “The RFP asked „What are you willing to do?” says Carl Nelson. “We [CEE] can organize the first workshop, train volunteers, develop marketing materials, deliver the program...’What can you bring?’ We are mainly looking for organizations that want to work with us to deliver people to that first workshop. We train volunteers recruited by those organizations, and they go door to door signing people up.”

In St. Paul, where there are fewer neighborhood groups with less funding, the approach has been different. The Green Institute, a nonprofit, has overseen workshop outreach. Chris Duffrin, NEC’s Executive Director, explains that knocking on doors is not the preferred strategy during the winter, when “you hardly see your neighbors for months.” Media outreach has been the main means for getting the word out. The NEC plans to introduce coordinated door-knock blitzes through neighborhoods during the summer months.

Separate the Pitch from the Technical Assistance

In Minneapolis, each Home Energy Squad includes an “energy technician” and an “energy counselor.” The energy counselor attempts to ensure that personal, responsive interaction with the homeowner doesn’t get overridden by a dense technical download.⁴ Once counselors have done walkthroughs with homeowners, they help explain the results of the technician’s tests and recommend further efficiency upgrades. The counselor can also answer questions about how to go about installing efficiency measures. The fact that the squad does not stand to benefit financially from further improvements helps to ease homeowner concerns about whether the recommendations they receive are in their best interest.

While keeping the homeowner engaged is a critical part of their residential model, it remains a work in progress. In the early stages of the pilot program, focus was placed on organizing the squads and training them to do the direct-installs. Training has now been updated to help squads learn skills to improve homeowner interactions.

Make a Disciplined Case for the Highest Value Investments

Recognizing that too many recommendations can be overwhelming to homeowners, home energy squads try to give just three suggestions for high-impact energy-efficiency improvements. Says CEE’s Nelson, “We don’t want to encourage homeowners to take steps that might save a little energy and keep them busy on weekends, but that won’t have much impact.”

⁴ In St. Paul, crews also have multiple members, but don’t carry these explicit job titles. Each crew has an NEC staff member to provide overall direction and consistency, and several younger people from the Minnesota Conservation Corps.



In practice, the program is still refining this effort through squad training as counselors often find difficulty keeping homeowners focused on high-impact investments. “Sometimes a homeowner asks a question about an action that he or she has heard a lot about and is really interested in – such as window replacement – but that doesn’t deliver significant energy savings at a reasonable cost,” reports Nelson. “When that happens, it can be challenging for the energy counselor to redirect the conversation to the most cost-effective upgrades such as air sealing.”

Try a Small Scale First, Then Be Accountable for Specific Outcomes

Pilot programs should establish quantitative measures to evaluate the success of innovative outreach approaches. These measures should be designed to inform how program implementation can be improved. One of CEE’s most important success metrics is the percentage of homeowners that follow-through on a recommendation made during their home visit to do a major energy efficiency upgrade. CEE is exploring methods for improving its conversion rate above the current estimated 20%. Its goal is for 50% of the homeowners who receive recommendations for major efficiency upgrades to follow through. Twin Cities One Stop staff is exploring providing detailed insulation bids to homeowners, with pre-approved pricing, during the home visit. This approach in a previous program run by CEE resulted in a 70% conversation rate. CEE will also be implementing a home energy labeling program later in 2010.

As Twin Cities One Stop moves out of its pilot phase, the program plans to expand the services it offers to homeowners as they consider recommendations for significant efficiency upgrades. The program will eventually hire individuals whose sole job function is to follow-up with homeowners during the decision phase – carefully helping them sort through financing approaches and vendors. Duffrin dubs this role “the energy concierge.”

Impacts and Evaluation

Since the Twin Cities One Stop pilot program launched in October 2009, Home Energy Squads have visited over 1,800 homes (1,200 in Minneapolis and 600 in St. Paul).

Staffing levels have grown rapidly to respond to the interest in the program. In Minneapolis, CEE now has 15 full time field staff serving on two-person crews, and another seven full- and six part-time office staff working on outreach and data systems development for the Twin Cities pilot and for similar programs in six other Minnesota cities. Staffing levels in St. Paul have also grown; the program expects to have 10 squads working in St. Paul neighborhoods by the end of 2010.

The “all-in” cost for this work is about \$550 to \$600 per home, plus the value of utility rebates provided to homeowners. While CEE estimates that the program will reduce energy use in participating homes by 10 to 15% on average across all of the homes served, the energy savings are difficult to measure as robust systems are not yet in place for tracking which homes invest in energy improvements. The program is developing a data system that will use utility bill data to track energy use changes in homes visited by the Home Energy Squads. This data will be used to judge program success and to inform participants about their progress in reducing their energy use, particularly relative to their neighbors and a hypothetical “efficient home”. This



system will also allow the program to focus expensive diagnostic tests only on the highest energy-use homes.

The Twin Cities One Stop Program hopes to, ultimately, conduct home visits in every single family residential building in the cities' jurisdictions. In the near term, CEE targets completion of 3,000 Minneapolis homes in 2010 and another 3,400 in 2011.

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