The Marshfield Energy Challenge
A Community-Focused Approach to Increase Demand for Retrofits

The Marshfield Energy Challenge (MEC), a two-year pilot program, reduced the town’s peak electricity use by bundling energy efficiency, solar photovoltaics (PV), and direct load control initiatives. The utility-led program made its offerings seamless and straightforward, then recruited local leaders as ambassadors. These leaders – selected from local schools, elected office, churches, and business – set the standard for energy improvements in their own homes and talked to townspeople about the program, both selling it and listening for feedback. Marshfield is an affluent town, and the program translated its message of using less energy into one of increasing property values. The MEC also used targeted direct mail to reach key households and businesses on a constrained electrical circuit. Over two years, the Marshfield Energy Challenge reduced the town’s peak electricity demand by over 1.2 MW. Two-thirds of this reduction was from the residential sector. Almost 1,300 homeowners received energy assessments, and 90% installed at least one energy efficiency measure.

Background

The $4 million Marshfield Energy Challenge in Marshfield, MA was administered and partially-funded by NSTAR, the regional utility, with additional funding from the Massachusetts Technology Collaborative (MTC), and the state’s economic-development agency. The initiative’s goal was to reduce the town’s 25 megawatt (MW) peak electricity demand by 2 MW. To do so, NSTAR offered free energy assessments to households and businesses, 500 free “smart thermostats” that would give NSTAR the capacity to raise household temperatures up to 4 degrees during peak demand, and 30 solar PV systems. While the Marshfield Energy Challenge attempted to reach all of the town’s residents, it made special efforts to get property owners on a congested electrical circuit to participate.

Harnessing Local Leaders to Engage the Community

NSTAR and its partners developed a marketing and outreach strategy early in program planning. During initial planning, the Marshfield Energy Challenge hosted a two-day community meeting and planning workshop and found strong support for the program from community leaders and residents. NSTAR capitalized on this by selecting twelve program ambassadors—school representatives, politicians, clergy members, and businessmen. Not only would these ambassadors lead by example by retrofitting their homes and businesses, but they would explain how the program worked to community members and serve as the program’s eyes and ears in Marshfield, delivering timely feedback to program managers.

NSTAR also had an employee who already served as the company’s Marshfield community liaison. The liaison had pre-existing relationships in town that were critical to the program’s success. No program manager has the capacity to show up in a town and have trusted relationships, and the liaison not only convinced politicians to get engaged in the Marshfield
Energy Challenge, but assisted program staff in ensuring that the program had a presence at important town events.

**Increasing Participation with Targeted Outreach**

The program took a two-tiered marketing and outreach approach. It conducted an umbrella advertising campaign focused on community-wide energy reduction using traditional media outlets (weekly newspaper and radio) and direct mail. Messaging focused on making the program specific to Marshfield and building community ownership and initiative. The program then used targeted direct mail advertising that included special offers to reach households and businesses that were contributing to peak demand on the constrained electrical circuit.

Direct mail was a successful vehicle for attracting interest in the program—industry average response rates to direct mail are 0.5%, and the Marshfield Energy Challenge got a 1.2% response rate to its direct mail campaign. More impressive, it got a 13-16% response rate to its targeted letters to those businesses and households on the key circuit. In follow-up interviews with program participants, almost 50% noted that mail was their preferred method of providing information, higher than any other medium. While direct mail had the highest conversion rates, program managers felt that the umbrella advertising was essential for branding and creating awareness of the program.

The program used a number of additional outreach tools to get its message into the community including e-mail updates, telephone follow-up, an energy lecture series, breakfast meetings, and activities at schools, concerts, fairs, and on election day. It did not, however, use online social outreach tools like Facebook and Twitter (although it did host a website and blog). Knowing how prevalent these tools are today, program managers mentioned they would make a much stronger online effort if they had to do it again.

**Community-Focused Messaging**

De-emphasizing NSTAR’s role in the program was critical. Residents typically do not have the power to select their utility, so messaging focused on the benefits to Marshfield as a whole to create greater community buy-in. In fact, NSTAR's name did not appear in program advertising until the 3rd week of the marketing campaign.

The key message was, “It’s all about where we live, work, and play.” According to Kathleen De Vito, a contractor responsible for much of the initiative’s outreach strategy, while the program didn’t ignore environmental messaging, it focused on communicating that you live here, this is the biggest investment you have, and we (The Marshfield Energy Challenge) want to help improve the return on your investment. Energy efficiency and a greener tomorrow are just additional perks.” The program also attempted to make messaging very town-specific to build grassroots support. This effort was so popular that neighboring towns began to pressure NSTAR to bring the “Energy Challenge” to their communities.
One important lesson learned was that, early on, the ambassadors felt that the Marshfield Energy Challenge needed a reward if the town reached its energy reduction goal. However, several focus groups indicated that rewards were not a motivator. Instead, people were motivated by wanting to do the right thing. In this vein, all program participants were given static cling labels that said “I did my part” to put in the windows of their homes and businesses.

**An Integrated Offer to Potential Participants**

While marketing and outreach were important to the Marshfield Energy Challenge’s success, just as crucial was the seamless offer to potential participants. Residents and business owners called a single dedicated line to schedule assessments, ask questions, and get follow-up assistance. The program piggybacked on the existing Mass Save\(^1\) residential energy efficiency assessment program and integrated a solar assessment and enhanced NSTAR and MTC incentives for lighting, refrigerators, air sealing and insulation, thermostats, an HVAC tune-up, and solar PV into the presentation of investment options. By offering all of these services during the home visit, NSTAR simplified the process for potential participants. A similar assessment was offered by a third party vendor to Marshfield’s businesses, although there was less emphasis on the commercial side of the program. “Ease of participation” was the most important factor in the decision to take part in the program among surveyed Marshfield residents.

NSTAR encouraged those residents that chose to participate in the Challenge to invest in comprehensive energy solutions that would maximize demand reduction by sweetening existing 50-75% subsidies for insulation and air sealing costs to 100% subsidies when homeowners consented to installing a thermostat with load control.

**Impact and Evaluation**

Over 21 months, the Marshfield Energy Challenge spent just over $125,000 on marketing and outreach. The Challenge reduced the town’s peak electricity demand by over 1.2 MW. Two-thirds of this reduction was from the residential sector. Almost 1,300 homeowners received energy assessments (higher than the Challenge’s 1,200 assessment goal), and 90% installed at least one energy efficient light bulb. Between 10 and 20% installed insulation, air sealing, or heating measures, or completed an AC tune-up and 32 (2.5%) residential customers installed solar panels. 88% of residential program participants rated their experience with the program as good.

It’s important to note that Marshfield is a small, wealthy town, and messaging/incentives may need to be tailored to target audiences in other areas. Financing was not a major obstacle in Marshfield, and may be a more significant barrier in less affluent communities. In larger cities, it may be difficult to develop the grassroots support that the program relied on.

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\(^1\) For more information on MassSave, a partnerships between utilities, energy efficiency service providers, and state organizations, please visit: [http://www.masssave.com/](http://www.masssave.com/)
Given a short time period to implement the program, NSTAR and its partners successfully harnessed existing trusted sources of information in the town to communicate the benefits of participating in the Marshfield Energy Challenge. NSTAR engaged these community leaders from the beginning, and their input was incorporated into program planning. Messaging focused on community and property benefits, and integrating marketing, implementation, and customer assistance was key to creating a seamless, simple experience for participating Marshfield residents and business owners.