# Take Charge Challenge

Community-Led Competition to Save Energy in Kansas

The Take Charge Challenge was a year-long energy use reduction competition between towns sponsored by a regional nonprofit in Kansas. In six towns, leadership teams were recruited among respected town leaders who communicated the benefits of the program to different constituencies within each town and played up the competition. The initiative led to savings of more than 6 million kWh during the program's single year. The installation of permanent energy-saving measures such as interruptible thermostats and more efficient air conditioning as a result of the Challenge also locked in more than 7 million kWh annual savings. The combination of local leadership with the incentive of competition resulted in higher levels of participation than organizers initially envisioned.

## Background

The Take Charge Challenge is an initiative of the Climate and Energy Project.<sup>1</sup> The goal was to prove that energy efficiency can lead to significant energy use reductions in every part of Kansas and under any utility structure (investor-owned, municipal-owned, or co-op). The program accomplished this goal, as well as turning the Leadership Teams in each town into enthusiastic energy efficiency champions.

The Take Charge Challenge ran from April 2009 through March 2010. Prior to starting the program, the Climate and Energy Project met with utilities to decide which towns to work with; they wanted a mix of urban and rural locations, small and large communities, and geographic diversity. All of the targeted towns agreed to participate in the program, and the Climate and Energy Project set up meetings with key leaders in each town from the Chamber of Commerce, schools, retail sector, etc. With the support of these key leaders, they recruited a larger Leadership Team of approximately 50 people per town. These Leadership Teams met about once per month during the Challenge.

To launch the program, the Leadership Team in each town hosted a community-wide party with free food and fun activities. Each quarter, there was another community party to announce the energy saving results to date and launch the next quarter of the competition. There were two competitions within the challenge based on: (1) actual kWh savings (relative to nearby non-participating towns); and (2) estimated savings from prescriptive measures installed (these included switching light bulbs and appliances and completing home energy improvements). The second competition metric was included to emphasize the importance of persistent savings in addition to behavioral changes. Switching light bulbs was a major focus of the competition, but households were also encouraged to install programmable thermostats, participate in the

<sup>&</sup>lt;sup>1</sup> The Climate and Energy Project is a nonprofit organization working in the Midwest to reduce greenhouse gas emissions "by increasing energy efficiency and developing renewable energies in a sustainable manner." Url: <u>http://www.climateandenergy.org/WhoWeAre/AboutUs/Index.htm</u>

Weatherization Assistance Program, and participate in utility-sponsored programs like appliance and HVAC rebate programs and home energy assessments.

## **Community Leadership and Competition**

Nancy Jackson, program director of the Climate and Energy Project, emphasized the role of the Leadership Teams in promoting the program; "we [the Climate and Energy Project] were visible to the members of the Leadership Teams but not to the towns themselves." The community leaders were the face of the program in each town. In choosing the Leadership Teams, the Climate and Energy Project realized that "there is no such thing as "the public'" – they needed to market the program to many audiences, and so they found leaders from each of these target audiences. These included churches, schools, low-income neighborhoods, Chambers of Commerce, agricultural interests, etc.

The Challenge messaging focused on energy savings, cost savings, and competition. According to Jackson, "it was the contest and the community pride and community spirit that really drove this." Although the Climate and Energy Project offered prizes to the two winning communities, in retrospect Jackson believes that this was not necessary and that the towns would have been just as competitive without this incentive.

As part of the program, a website was set up on which residents could log how many CFL light bulbs they had installed. This website allowed people to see which town was winning the Lighting Challenge aspect of the competition in real-time, and scrolled the names of participants and the number of bulbs they had changed, keeping the competition lively. However, Jackson notes that because many in these towns do not use computers, word of mouth and person-toperson contact was critical.

The communities were very creative in pursuing energy efficiency savings. For example, for Halloween, one town held a "vampire hunt" in which schoolchildren looked for "phantom" (plug) loads in their homes; the classroom with the most children who participated won a pizza party.

One superintendent of schools (who served on the Leadership Team) realized that one school was using vastly more energy than an identical school in the district. Both schools had received efficiency upgrades in the late 1990s, so the typical "low-hanging fruit" of lighting, boilers, HVAC and systems operations had been plucked. Behavioral changes – mostly janitorial and summer thermostat settings – led to a million kWh and \$42,000 savings annually.

The Climate and Energy Project worked closely with local media to spread the word. In one town, one member of the Leadership Team owned six local radio stations that recorded and played public service announcements throughout the Challenge. These PSAs showcased members of the Leadership Team explaining why the competition was valuable to different segments of the community. Local media often showcased personal stories of how much energy people were saving; in one town, the first home energy assessment completed by the local utility received news coverage.

### **Results and Evaluation**

The Take Charge Challenge was run by two half-time staff at the Climate and Energy Project, plus additional staff time devoted to website and press communications. The Climate and Energy Project spent \$150,000 on the program, split evenly between staff time and program expenses (including prizes and giveaways). Utilities estimated that they spent a combined total of \$20,000 on the program, and towns also ended up contributing resources, mainly city staff time and event venues. Though the program could not precisely track how many residents were engaged by the Challenge, they estimate that over 10,000 people (more than 10% of the total population of the participating towns) attended at least one event.

Evaluating kWh savings was difficult because of the challenge of choosing a suitable baseline. Because of the economic downturn, comparing to the previous year would have overestimated the savings attributable to the Challenge. Instead, each town was compared to a nearby town or region with similar demographics. The winning town in the kWh savings competition reduced energy consumption by 5.5% relative to its control town. For the other competition (estimated savings from long-term measures like weatherization and appliance upgrades), the winning town saved an estimated 3.7 million kWh per year from both the residential and commercial sector (about 2.5% of the town's total electricity use). In terms of comprehensive energy improvements, the program resulted in 112 assessments and 300 households that signed up to participate in the Weatherization Assistance Program.

#### Lessons learned

According to Nancy Jackson, "peer to peer communication is critical to the success of the program." She emphasized the importance of identifying "credible messengers and credible messages." Influential, engaged, and active Leadership Teams delivered the energy conservation message to town residents. Granting so much autonomy to the Leadership Teams led to many creative ideas that the Climate and Energy Project could not have developed on its own. And tapping into the towns' pride and competitive spirit was a huge motivator in generating interest. According to Jackson, in the next round of the Take Charge Challenge, they plan to work in towns that are already natural rivals (for example, sports rivals) in order to capitalize on the competition aspect even more. The Challenge was also a valuable educational opportunity for the Leadership Team members, many of whom entered the initiative with very limited knowledge of energy efficiency. According to Jackson, "we now have very loud champions for energy efficiency who previously literally didn't know what efficiency meant."