

# Central Hudson Gas & Electric Corp

## Home Energy Comparison Report: Process Evaluation Summary

*Evaluation Conducted by:* Applied Energy Group (AEG), DATE: February 2015

### **PROGRAM SUMMARY**

The objective of the Home Energy Comparison Report Program is to promote residential energy efficiency by influencing consumer behavior. Targeted customers receive home energy reports approximately every other month. The reports provide information about household energy usage compared with the average use of neighbors with similar household characteristics as well as energy saving action tips. The third-party implementation contractor, Opower, develops the home energy comparison reports, selects program participants and tracks participation.

Central Hudson targeted 110,000 residential customers to receive the home energy reports over a 15-month period. The targeted customers were selected based on energy consumption patterns, housing data, past program participation and demographic data. Approximately 80,000 electric-only customers receive electric only reports and 30,000 natural gas and electric customers receive combination reports. The targeted customers are able to opt-out of the program at any time.

### **EVALUATION OBJECTIVE AND HIGH LEVEL FINDINGS**

An independent evaluation contractor, Applied Energy Group (AEG), designed the 2012-2013 process evaluation to gain a better understanding of program operations, assess the overall effectiveness of program operations and identify areas for improvement. AEG performed the following tasks:

- Reviewed program materials and data.
- Reviewed program tracking methods.
- Updated program logic model and assessed program flow.
- Conducted interviews with Central Hudson staff and third party implementation contractor, Opower.
- Conducted surveys of participating customers.

Central Hudson spent the entire budget in 2012, exceeding the electric savings goal and achieving 83 percent of the natural gas savings goal. As of June 30, 2013, Central Hudson spent 45 percent of the budget, achieving 70 percent of the electric savings goal and 44 percent of the natural gas savings goal. As of December 31, 2013, there were 102,052 households that received Home Energy Comparison Reports and 38,796 households in the control group. According to Opower, the household opt-out rate has remained low at approximately 1 percent. The number of households that opted-out of the program has decreased since the fall of 2012.

## **EVALUATION RECCOMENDATIONS AND PROGRAM ADMINISTRATOR RESPONSE**

The following recommendations were made by the evaluators conducting this study. Central Hudson's initial response to these recommendations is also summarized below and will be tracked over time.

### **Recommendation 1: Customize Home Energy Comparison Reports**

The Residential Energy Comparison Report Program was launched in June 2011 and has been sending bi-monthly reports to the same participants since that time. The implementation contractor, Opower, develops the home energy comparison reports, selects program participants and tracks participation. Central Hudson has found it difficult to change report content and update the energy saving action tips. The majority of survey respondents noted that the energy saving action tips were somewhat useful, with 12 percent finding them very useful and 6 percent finding them not useful.

AEG recommends that Opower work with Central Hudson to update energy saving action tips to keep participants engaged and to determine if reports can be customized to targeted specific households. For example, customizing action tips based upon household energy usage or socioeconomic indicators.

**Response to Recommendation 1:** We have worked with Opower to provide a larger and extensive library of tip options for customers. Opower has recently come out with multiple new campaigns that Central Hudson will be utilizing this year and in future years. These campaigns highlight seasonal weather and try to provide messaging that all customers can relate to.

### **Recommendation 2: Improve Data Request Response**

Central Hudson staff cannot access the Opower tracking system or view program data and data requests typically take 3 to 4 weeks. AEG recommends that Opower work to provide Central Hudson staff with at least read only access to the tracking system and reduce the amount of time it takes to generate a data request response.

**Response to Recommendation 2:** Opower has recently built a dashboard system called "Inside Opower" that Central Hudson has access to. This will help expedite and streamline data requests as well as provide different KPIs at any specified time interval.

### **Recommendation 3: Integrate Other Central Hudson Programs**

The Home Energy Report Program provides an opportunity to promote other energy efficiency programs offered by Central Hudson. The Home Energy Reports and Home Energy Reporting website should be customized to take full advantage of any potential cross-program synergy.

**Response to Recommendation 3:** We currently use the HER as a way to cross-promote our other energy efficiency programs. This has been a very cost effective way to promote other options our customers can take advantage of.

## **DETAILED PROCESS EVALUATION FINDINGS**

According to survey results, 84 percent of customers read all of the Home Energy Comparison Reports. Survey respondents found the comparison of household consumption to the prior year most useful (35 percent), followed by the neighbor comparison (19 percent) and the energy saving action tips (10 percent). Forty-one percent of survey respondents had discussed the report with someone else, primarily household members, followed by neighbors and friends. According to the survey results, participants are satisfied with the program. However, participants are least satisfied with the report content and approximately 25 percent of participants are neutral about the energy savings tips.

More than half of survey respondents have taken steps to reduce their household energy use in the last two years (62 percent), primarily by adjusting the thermostat temperature, turning off lights more frequently, and taking shorter showers. The majority of survey respondents have not participated in another Central Hudson program.

## **EVALUATION METHODS AND SAMPLING**

AEG administered a 10 to 12 minute telephone survey to a sample of program participants to assess program experience and awareness, customer satisfaction and areas for potential program improvement.

Opower selected 133,073 customers to receive home energy reports.<sup>1</sup> Opower analyzed customer billing data as well as third party demographic and geographic parcel data to determine which regions within Central Hudson's service territory to target. Customers were selected using two sets of eligibility criteria:

- *Site eligibility:* Ensured a site can be used in the neighbor comparison and that customers at the site could potentially be recipients.
- *Customer eligibility:* Ensured the customer had sufficient energy usage history with the utility.

The selected customers were randomly assigned to a control group or a recipient group (i.e. receive Home Energy Comparison Reports).<sup>2</sup> Opower ensures a statistical balance between the control and recipient groups. AEG calculated the sample size at a 90 percent confidence interval with an error margin of +/-10 percent. The sample size was calculated at 68. Participants were then randomly selected based on unique identifiers determined by Microsoft

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<sup>1</sup> Opower selected more than the 110,000 customers to ensure that the target was maintained with opt-out customers.

<sup>2</sup> The control group and recipient group targeted 110,000 customers each.

Excel's random number generator. Participants were contacted based on the unique identifier, beginning with the smallest number. Sixty-eight surveys were completed in May 2014.

AEG updated the program logic model based on interviews with Central Hudson program staff and the third-party implementer. The model shows the linkages among the program's activities and outputs. There are five main activities in the Home Energy Comparison Reports Program, including: develop program infrastructure, customer selection, home energy reports, program tracking and evaluate program.