ENERGY EFFICIENCY PROGRAMS: HOW MUCH DO CUSTOMERS REALLY CARE?

In June, the American Council for an Energy-Efficient Economy (ACEEE) released the first edition of its "Utility Energy Efficiency Scorecard," rating the 51 largest U.S. electric utilities (by retail sales volume) across a wide range of energy efficiency metrics.

The report ranked the top ten utilities as:

1 - Eversource Massachusetts

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2 - Pacific Gas & Electric

3 - Baltimore Gas & Electric

4 - Eversource Connecticut

5 - Southern California Edison

6 - San Diego Gas & Electric

7 - Commonwealth Edison

8 - Portland General Electric,

9 - Xcel Colorado

10 - Xcel Minnesota

Geographical location played a role in performance. The report noted that seven of the top ten utilities were located in the Northeast, and that the utilities in the Northeast earned an average ranking of 62 percent. In second place were utilities in the West, at an average of 57 percent. The Southeast was the lowest scoring region, and five of the bottom ten utilities were located in the Southeast.

The top ten utilities invested an average of six percent of total revenue on energy efficiency, while the bottom ten invested an average of 0.7 percent. The overall average was 2.7 percent.

One of the most common programs being offered by these utilities involves encouraging customers to purchase efficient appliances, lighting, and HVAC equipment.

Other programs included residential time of use rates, residential geo-targeting, zero net energy buildings, and encouraging customers to install other technologies, including smart thermostats and advanced space-heating heat pumps.

On average, the 51 utilities saved an average of 0.89 percent of retail sales, compared to an average target of 0.77 percent. And, the two best-performing utilities both achieved more than three percent savings as a percentage of their total retail sales.

So, this report highlighted what utilities have been offering customers in the way of energy efficiency. But what are customers really interested in as relates to energy efficiency and other benefits?

A new report from the Smart Grid Consumer Collaborative (SGCC), titled "Consumer Pulse and Market Segmentation Study," provides insight into that question. The study examined how customers interact with electric utilities, and how they view the broad suite of smart grid technologies and programs.

In ranking the importance of smart grid benefits, 74 percent cited "Save money by using energy more efficiently," 70 percent cited "Prevent and reduce length of outages," 65 percent cited "Reducing greenhouse gas emissions by making it easier to connect renewable energy," 62 percent cited "Limiting the need for new power plants," and 59 percent cited "Range of rate and billing programs."

In terms of respondents' interest in other smart-grid enabled programs, 74 percent cited "An energy storage system," 58 percent cited "Rooftop or a shared solar installation," 56 percent cited "Programmable or smart thermostat," 51 percent cited "Appliances with communication capabilities," and 38 percent cited "An all-electric or plug-in hybrid vehicle."

Interestingly, though, interest in the programs and technologies being offered did not equate in any way, shape or form with actual customer usage of these programs and technologies. In terms of what percentage of respondents had actually installed/implemented these smart-grid enabled programs, only two percent had installed “An energy storage system,” two percent had installed or participated in a “Rooftop or a shared solar installation,” nine percent had installed a “Programmable or smart thermostat,” one percent had purchased/installed “Appliances with communication capabilities,” and one percent had purchased “An all-electric or plug-in hybrid vehicle.”

Also interesting were customers’ expectations as related to how much (if any) money they would be willing to pay for these programs and technologies. Approximately half (49%) of respondents said that the smart grid benefits are “Important, but only if provided at no additional cost.” Approximately one-quarter (23%) cited the benefits as “Important, but unable to pay three to four dollars a month more,” and the other quarter (26%) cited the benefits as, “Important, willing, and able to pay three to four dollars more per month.”

Customers cited other barriers to engaging in energy-saving activities, including “Unable to change features to make home more energy efficient (a barrier related specifically to renters) (59%), “Replacing inefficient equipment costs too much money” (40%), “Energy saving programs do not fit needs” (26%), “Efforts to save energy at home do not positively impact the grid” (23%), and “Other members of household do not care about saving energy” (22%).

Bottom line: When it comes to offering programs to customers for saving energy and other benefits, it is important not only to find out what customers claim to be interested in, but, “when the rubber meets the road,” how willing they will be to actually implement the programs and technologies, based on the time, effort, and costs involved.

About the Author

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