

Inspiring Customers to Choose Clean Energy

Objective

Texas A&M teamed with the New York State Energy Research and Development Authority (NYSERDA), InfoGroup, and ClearlyEnergy, a market facilitator for residential green energy (wind-, solar- and hydro-powered electricity), to inspire customers to choose clean, renewable sources of electricity.

Background

When presented with many options and prices, research shows that customers are more likely to be overwhelmed with information and will be less likely to make the decision to switch to clean energy. This pilot was designed to test whether customers are more willing to evaluate the benefits of choosing clean energy and decide to make a clean energy purchase if presented with fewer options.

Pilot Description

More than a million New York State electricity customers were contacted by InfoGroup via email invitation to visit ClearlyEnergy's website and learn more about "greening up" their electricity with renewable sources. Participants were randomly divided into two groups. The first group was given a small number of choices for energy providers offering different levels of renewable energy (50% or 100%), while the second group had a larger number of providers offering similar options.

ClearlyEnergy collected detailed data on the options participants selected from the landing page, as well as click through rates, and conducted follow-up surveys in order to determine what was most influential in leading customers to explore clean energy providers' websites. A willingness to pay (WTP) follow-up survey using Qualtrics—a firm that conducts web-based surveys using representative samples—was conducted with 1,050 New York households. This was used to determine if the current market price of renewable energy was priced within customer's WTP estimates. Participants were asked to report WTP for eight different options: 100% or 50% renewable power for each of the following choices; New York State renewable generation vs. renewable generation available nationally, and New York State wind generation vs. New York State renewable generation.

Findings

The evaluations showed customers who received the smaller number of choices were no more likely to click for more information from ClearlyEnergy's landing page than those who received the larger number. There were only two households that showed interest, one for 50% renewable power and the other for 100% renewable power. Only the household that considered the 100% renewable option decided to purchase. The incremental cost of 100% renewable power was approximately \$40/month at the time of the study.

The Qualtrics survey results showed that average WTP is \$12.77/month for 100% renewable power and \$9.10/month for 50% renewable power, and New Yorkers' WTP does not depend on whether the source of renewable generation is local or national. Higher income households are willing to pay more than lower income households and younger heads of households (under age 40) are willing to spend 30% more than older heads of households (over age 40).

Conclusion

Because customers' WTP in the State is less than the cost of renewable energy options sold by New York utilities at the time of this study, researchers concluded that customers were unwilling to purchase renewable power at the prevailing market price. However, it is anticipated that lower prices with a smaller set of options to choose from will likely increase the purchase of renewable, clean energy in the future

Solution

Renewable energy providers in New York State can now receive subsidies from NYSERDA, which enables them to offer customers clean electricity at rates equal to or below that of conventional power prices.

Visit NYSERDA's Behavior Research page nyserda.ny.gov/behavior-research for more information.

