E Source

Letting data do the work to better understand customers and their energy needs

Data science case study

February 16, 2023

Key takeaways

- A midwestern utility needed a way to identify customers who rely on electricity for heating and cooling, with the overall goal of better reaching these customers and helping them save energy.
- The utility turned to the E Source Audience of One solution to group customers into cohorts based on their energy usage profile, the equipment they use in their homes, and their HVAC usage intensity.
- With a better understanding of its customers and an emphasis on supporting low- and moderate-income customers, the utility could reach the right customers at the right time.

The challenge

A midwestern utility wanted to provide opportunities for customers who rely on electric heating and cooling to save money on their electric bills. But it was difficult for the utility to identify these customers and determine what kind of HVAC equipment they use.

Gain a better understanding of your LMI customers.

Contact our team to learn more about our expertise and how we can help.

The solution

The utility partnered with E Source to build a model, combining the utility's billing data, advanced metering infrastructure data, and proprietary E Source data to:

- Identify which customers were using electric heating and air-conditioning
- Document the type of equipment in customers' homes
- Disaggregate hourly electricity usage into bands attributed to HVAC end uses
- Compare customers' HVAC usage intensity with that of their peers

The results

The E Source model enabled the utility to group their customers into peer cohorts. E Source geographically mapped these results at the county and premise address level, allowing the utility to develop targeted campaigns by region or neighborhood. The strategy boosted energy efficiency program awareness among customers by focusing on those who would benefit most from participation.