E Source

Providing customers with new energy-saving measures to help meet decarbonization goals

Research and advisory case study

June 15, 2023

Key takeaways

- A Canadian gas utility needed to develop new customer programs to meet its decarbonization goals and help customers save energy. But the utility was overwhelmed with the process of evaluating the abundance of new technologies.
- An E Source membership granted the utility access to technology experts, unbiased research, pilot data, and comprehensive tools to help them feel more confident in their technology and program evaluations, strengthening their filings and avoiding criticism from regulators.
- E Source resources helped the utility create a new technology funnel of 1,000 screened measures. The utility narrowed that list to 100 measures before identifying 12 to move into programs.

The challenge

A Canadian gas utility was under regulatory pressure to develop new programs to meet stringent decarbonization goals. The utility was determined to meet its goals while serving as its customers' energy adviser. But the utility was overwhelmed by the number of new technologies and unsure of the best way to evaluate them. The utility had vetted more than 1,000 technologies but had exhausted its resources. It needed help narrowing the list to a manageable dozen to move into programs.

The solution

The utility turned to the E Source [Technology Assessment Service](#), getting access to E Source technology experts, data and tools, and events. These resources helped the utility finalize the list of new program measures. The E Source team helped the utility analyze gaps in its current programs to identify new technology opportunities. And the utility relied on E Source data to identify measures that performed well in other utilities' programs and would be most applicable to the utility's customers and goals.

Using the resources available through its E Source membership, the utility was able to perform extensive due diligence, and the new measures produced noteworthy energy savings.

Some of the E Source resources that supported the utility's efforts included:

- *[Ask E Source](#)* (PDF). Through the Ask E Source program, the utility sent questions directly to the E Source technology team. The team researched specific technologies and performed sanity checks on the utility's evaluations of each measure's potential applications, the market, and customer readiness. Quick, thorough responses from E Source experts helped the utility move the technologies through the pipeline.
- *Research reports and databases.* The research reports and technology content available via the E Source website helped the utility build its initial list of potential measures.
- *Online and live events.* The semiannual "Tech roundup" webinar, the annual E Source Forum conference, and the annual Technology Leadership Council delivered information on trending technologies, cost-effectiveness, and market potential. And through these events, the utility was able to consult with E Source experts and industry peers.

The results

E Source technology resources helped the utility determine which technologies were worth investing in, saving valuable R&D time and increasing speed to value. E Source research and advisory services enabled the utility to take a closer look at potential technologies, revealing:

- Whether similar technologies existed in the market
- Whether other utilities included the technology in their programs
- Whether the technology would benefit customers
- What the potential energy savings would be

E Source experts acted as an extension of the utility's staff, doing research through the Ask E Source program

as the utility vetted measures. Relying on E Source information, the utility narrowed its technology list from 1,000 measures to 100 to 12. Thanks to the utility's E Source membership, the project took little budget to complete and achieved big results.

The next steps

After creating a solid list of new technologies, utilities can partner with E Source [Data Science](#) to identify the right customers to promote those technologies to. The E Source [Audience of One](#) solution uses a data-driven approach to help utilities find the best customers for their updated programs by providing a deep understanding of each individual customer.

The E Source solution combines hundreds of data points, starting at the smart meter level, and uses proprietary algorithms to accomplish several goals:

- Identify customers who are most likely to adopt the technology
- Craft appropriate messages to encourage adoption
- Simulate program and grid impacts
- Implement automation to continuously improve efforts