



Beneficial Electrification

Case Study

ICF Advantage

Trusted: ICF experts provide a credible track record of offering results-based solutions for utilities in North America.

Proven: Our comprehensive assessment process addresses key business needs and matches them with the best possible technology solutions, followed by expertly constructed business plans and scientifically based methods to objectively evaluate results.

Local: ICF works where you work, providing local expertise with deep knowledge of historical business practices, key industry players, and local/state government regulations and incentives.

Learn more about how ICF's on-road and off-road electrotechnology programs can help your organization:

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The Clean Air Technologies Program for CenterPoint Energy

The Clients

Using market research, analytics, and implementation, ICF supports electric utilities in increasing the adoption of electrotechnologies, which promote the displacement of fossil-fueled customer equipment with electric-powered equipment. Sometimes dubbed "decarbonization" or "beneficial electrification," these programs address the growth needs of electric utilities while also providing compelling benefits for businesses, consumers, and the environment. Utilities can promote the use of non-road, electrically powered equipment—such as forklifts, airport ground support equipment, agricultural equipment, and cranes—across a variety of applications. These technologies typically have a much longer life (and utility revenue stream) than their internal combustion counterparts, and can increasingly be promoted in ways that limit the impact on peak demand and focus on increasing off-peak and shoulder-period usage. We are currently implementing electrotechnology management programs for utilities across the United States and Canada.

One such utility is CenterPoint Energy of Houston, Texas. A business leader in this large, metropolitan community, CenterPoint does not generate energy, but rather provides electric transmission and distribution to customers in a 5,000-square-mile service territory. The company's other services include natural gas distribution and natural gas sales and service.

While ICF's electrotechnology programs for utilities often have similar goals, each utility is unique—with its own service territory, local and state government and industry regulations, and industry leaders in the mix. As such, our approach to each client is tailored and rooted in a local understanding of the business circumstances in which our client operates. CenterPoint is no exception.

The Challenge

CenterPoint approached ICF with the goal of increasing revenue and growing its business. And, while CenterPoint is a distributor—not a generator—of energy, its position in the burgeoning Houston business community made it impossible to ignore the growing problem of the city's poor air quality. Thus, CenterPoint's challenge of increasing revenue also came with the opportunity and necessity of finding environmentally responsible means of doing so—provided those means would result in greater business opportunity for the company.



Case Study

About ICF

ICF (NASDAQ:ICFI) is a global consulting and technology services provider with more than 5,000 professionals focused on making big things possible for our clients. We are business analysts, policy specialists, technologists, researchers, digital strategists, social scientists, and creatives. Since 1969, government and commercial clients have worked with ICF to overcome their toughest challenges on issues that matter profoundly to their success. Come engage with us at icf.com.

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The ICF Solution

Early on, CenterPoint was interested in evaluating new clean-burning technologies that would contribute to their revenue goals but lacked the expertise to do so. Enter ICF and our electrotechnology programs. For CenterPoint, we conducted thorough technology assessments of more than 60 potential technologies for the Clean Air Technologies (CAT) program. The assessments included gathering market intelligence, data analytics, utility rates and policies, and other industry insights about each technology. Then, each technology was carefully analyzed and prioritized according to its potential value and impact. Ultimately, ICF recommended three key technology areas of focus for CenterPoint's business and revenue growth needs: forklifts, pipeline compressors, and shore power.

Our work did not end at this recommendation, though, but extended to thorough implementation and maintenance phases. ICF provided instrumental expertise and industry influence in bringing these technologies into CenterPoint's service territory. With personnel based in the Houston area, we had industrial and institutional knowledge of the key technology and government players involved. Thus, we were able to facilitate discussions and negotiations effectively—including meetings with equipment dealers, vendors, and battery manufacturers as well as providing industry insight about environmental incentive programs offered by state and local government agencies.

A key element was using grant incentives offered by the Texas Emissions Reduction Plan (TERP) to make CenterPoint's program attractive to equipment dealers. Administered by the Texas Commission on Environmental Quality, TERP provides grant incentives to encourage replacement of fossil fuel-based equipment with newer, clean-burning units. ICF's knowledge of how to make best use of these grants to the advantage of both the equipment dealers and CenterPoint was a key factor in bringing new technologies into CenterPoint's service territory. And, in a community and industry with a very ingrained history of set business practices, ICF was able to leverage its local cultural knowledge and expertise to address pushback with financial facts and incentive information.

In addition, ICF provided proven and trusted methods of evaluating impact. We conducted expert metering studies to demonstrate and confirm that the data presented in our initial business plans and technology recommendations were accurate. We now meet ongoing annual goals for bringing new equipment into CenterPoint's service territory, and we provide the company with performance reports that demonstrate the ongoing effectiveness and impact of the program.

The Results

The CAT program has been very successful in helping to strengthen CenterPoint's leadership in the local community while increasing revenues, which are estimated to have a value of more than \$10 million for CenterPoint. The program's success has led to a performance-based contract in which ICF handles all training and marketing activities for CAT, including dealer and sales staff training and TERP application reviews. Since the program's inception, ICF has helped secure more than \$4.5 million in TERP grants for Houston-area businesses. In addition, the program has helped ICF reduce environmental emissions at the equivalent level of removing more than 22,000 cars from Houston-area roadways.

