

In Fort Collins, Pos-En carves out a market in microgrids

AT UNIVERSITIES, COMMERCIAL BUILDINGS, MILITARY BASES, AND OTHER PLACES AROUND THE WORLD, microgrids are becoming ever more common as a way to cut costs and boost reliability. Fort Collins-based Pos-En—the name is a short version of positive energies—is an example of the growing business in this new landscape.

Founded in 2011, Pos-En currently has 11 employees and expects to double that number by the end of next year. Founder Dan Gregory saw an opportunity to synthesize different emerging technologies into stronger, smarter energy systems while he was chairing the industry advisory board of the FREEDM Systems Center, a research group at North Carolina State University dedicated to modernizing the grid.

Now the company is building microgrids for both private enterprise and government. For the city of Boulder, Pos-En plans to add solar power, battery storage and other upgrades to critical sites such as emergency shelters. In Barranquilla, Colombia, it's modernizing the Ernesto Cortissoz Airport to bring down energy costs and increase reliability.

A number of factors have converged to make the time right for Pos-En's microgrid work, says Bob Lachenmayer, chief operating officer. In a 24-7 world, "the need for resiliency is increasing because the cost of downtime is increasing," he says, while at the same time, "the cost of generation on-site is just plummeting."

While the company doesn't promote one type of energy solution, Lachenmayer says, prices for solar power have reached the point where it outperforms the grid and is often "a much better alternative" than fossil fuel. That, combined with smart appliances, efficient heating and cooling systems, and advances in direct current and storage systems, makes it possible to build much more cost-efficient, reliable energy solutions.

Business models are also changing, Lachenmayer says, thanks to programs such as the Department of Energy's Property-Assessed Clean Energy (PACE), which he calls a "game-changer." PACE allows commercial property owners to finance efficiency improvements that might otherwise be ignored because they would benefit the tenant more than the owner. By making such improvements more appealing and affordable, programs like PACE open up the market for companies like Pos-En.



Ben Gregory, 26, works in business development at Pos-En. He's one of a growing number of millennials working in the clean energy industry in Colorado. (Photo courtesy of Pos-En)

The fact that Pos-En is technology-agnostic "actually attracts a lot of people" as employees, Lachenmayer says, because there's an opportunity to "create a custom approach client by client." He looks for systems engineers, project managers and other people who are not afraid to think outside the box. His main hiring challenge, he says, is finding people who can take a whole-system approach and can "live in the possibilities."

The sense of possibility is what led Gregory's son Ben, 26, to join the company three years ago. After starting as a coordinator, he's now in business development. "A big part of the clean energy field is breaking through the classic story of why we need a lot of fossil fuel generation," Gregory says. Reassessing that mix, with the attendant benefits for health and the climate, he says, has "made me passionate about what I'm doing."

Lachenmayer expects the company's business will eventually be evenly split between domestic and international clients. "Colorado is a great place to do business for what we're doing," he says, with its diverse energy industry and aggressive adoption of PACE. "Honestly, our biggest challenge is around staying focused and not getting distracted by all the different possibilities."