

Case Study

Half Acre Beer Company

Powered by Hops. Optimized by CHP.

Craft beer may be an art, but producing it at scale is an energy-intensive science. From heating process water to generating steam and powering operations, breweries live at the intersection of thermal demand and electrical load. For Half Acre Beer Company, a beloved Chicago craft brewer known for quality and consistency, rising energy costs and sustainability goals demanded a smarter solution.

A Better Way to Brew

Traditional boiler systems work hard to generate steam, but much of the energy used in power generation is lost as waste heat. That inefficiency creates higher fuel bills, greater electrical dependency, and unnecessary strain on the grid.

Boilersource identified Combined Heat and Power (CHP) as the ideal solution. By capturing and reusing reject heat from on-site power generation, CHP fundamentally changes how energy is produced and consumed inside a brewery.

Double the Output. One Smart System.

Boilersource engineered and delivered a CHP system that produces both electricity and usable heat at a fraction of the cost of traditional utility power.

The CHP system:

- Generates electricity on-site at a lower cost than utility power
- Uses recovered heat to pre-heat process water, reducing boiler load
- Improves overall system efficiency while lowering emissions
- Creates a more resilient and predictable energy profile

Instead of wasted energy, Half Acre now benefits from continuous thermal and electrical production working in harmony.

The Installed Solution

Boilersource delivered a fully integrated CHP system tailored to Half Acre's brewing operation, including:

- (2) EC POWER XRGI® 25 Power Units
- (2) IQ25 Control Panels
- (2) Q70 Heat Distributors
- (2) CHP Buffer / Storage Tanks (415 gallons each)

Peace of Mind, Brewed In

Beyond dollars and cents, CHP gives Half Acre something just as valuable: confidence. Confidence that energy costs are controlled. Confidence that their operation is more sustainable. Confidence that they are reducing their carbon footprint while easing demand on the electrical grid.

Turning a Cost Center into a Profit Center

With CHP in place, Half Acre Beer Company is saving money on both sides of the meter.

Energy Economics (Hourly):

- Total CHP operating cost: \$7.48/hr
- Electric savings: \$6.24/hr
- Natural gas savings: \$5.16/hr
- Total energy savings: \$11.40/hr
- Net savings: \$3.92/hr

Those savings compound day after day, year after year, delivering a strong return on investment while insulating the brewery from volatile utility pricing.

Utility rebates and tax incentives further strengthen the business case. For CHP systems of this size, available utility incentives typically range

between **\$75,000** and **\$90,000**, significantly reducing upfront capital cost and accelerating payback.

With Boilersource as their partner, Half Acre Beer Company is proving that great beer and smart energy management can go hand in hand.



BOILERSOURCE
Going Beyond the Boilerplate