The battery business is a competitive one, and companies like Crown Battery—based in Fremont, Ohio—will go to great lengths to maintain a competitive edge.

Crown Battery’s products are found in heavy-duty equipment around the world, including the railroad industry, steel mills, renewable energy installations and recreational marine and automotive industries.

To stay ahead of the pack, one strategy that’s allowed Crown Battery to reduce its operating expenses and bolster its brand is a focus on using energy as efficiently as possible in the company’s 250,000-square-foot manufacturing facility.

Over the last three years, Crown Battery has saved almost $1.3 million, thanks to energy-saving measures and incentives available through AEP Ohio, the local utility. And, along the way, the company has made its products more marketable. “Not only are we saving money, but it helps increase our sales,” explained Matt Culbertson, who leads the company’s energy-efficiency initiatives. “A lot of people come to us because they see how much we’ve improved our energy efficiency. It helps our reputation.”

And what started as a money-saving venture has evolved into a company-wide commitment to continuous improvements in energy efficiency.

Every quarter, top management and the owner meet with all 550 employees to review how the company is doing as a whole, with energy data broken down by division. Employees are encouraged to submit energy-saving ideas via a sign-up sheet in the company cafeteria, and anyone who submits an idea gets a “Save a Buck Dynasty T-shirt,” a play on the Duck Dynasty TV series, that says “Saving Energy is a Fact, Jack,” on the back.

“I see folks walking around town, and coming into work, wearing those T-shirts.” said Culbertson.

Crown Battery Quick Facts

<table>
<thead>
<tr>
<th>Type of Project:</th>
<th>Lighting upgrade, battery charging upgrade, geothermal cooling, etc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment:</td>
<td>$1,299,480</td>
</tr>
<tr>
<td>Payback period:</td>
<td>Approximately 4.5 years</td>
</tr>
<tr>
<td>Utility Incentives:</td>
<td>$316,893</td>
</tr>
<tr>
<td>Savings:</td>
<td>$150,000 to $210,000 annually and rising</td>
</tr>
</tbody>
</table>

“AEP Ohio incentive programs have allowed Crown Battery to get money back on capital investments and increase our energy efficiency. This has shown through employee participation in energy savings, and given Crown Battery the road map to energy savings success.”

- Matt Culbertson
Project/Energy Engineer,
Crown Battery

Efficient manufacturing processes have cut in half the time to form batteries

Energy savings continued on back ✓
Get Started Saving Today:

Combined Heat and Power and Waste Heat to Power could supply 20 percent of U.S. electric capacity by 2030

The Alliance for Industrial Efficiency is a growing coalition of business, labor, and non-profit organizations that advocate for policies that increase U.S. manufacturing competitiveness through industrial energy efficiency, especially the use of Combined Heat and Power (CHP) and Waste Heat to Power (WHP). To date, the Alliance has focused on improving financing for CHP and WHP, increasing demand for CHP and WHP, and incorporating CHP and WHP in the Environmental Protection Agency’s Clean Air Act rules.

For more information go to alliance4industrialefficiency.org or call 202.365.2194

Let the Energy Savings Continue:

Crown Battery’s energy-saving journey started in 2008 with simple steps like replacing inefficient lighting systems. It moved on to more ambitious energy-saving measures, including a more efficient battery charging system (70 percent of the facility’s energy is used to charge batteries) and installing an open-loop geothermal process cooling system. Today, thanks to these combined efforts, Crown is saving between $150,000 and $210,000 annually on its energy bills.

Energy-saving measures are identified, vetted and managed through a comprehensive energy-management program that includes diagnostics, planning and regular energy audits to test progress. The program is managed by the Crown Energy Team, led by Culbertson.

The company’s goal is to reduce its energy usage by three or four percent each year, allowing it to use less energy—and save money—for every battery produced. This, in turn, translates to higher profits.

Crown Battery has utilized incentives provided through AEP Ohio, which has helped offset some of the up-front investments for energy savings. And, Crown Battery is an active participant in AEP Ohio’s Continuous Energy Improvement Program, which provides opportunities to network with other companies and access to tools, coaching and resources to identify additional energy savings. AEP Ohio incentives have helped reduce the payback period for energy-efficiency investments to date by more than a year, from 5.7 years to approximately 4.5 years.

“AEP Ohio incentive programs have allowed Crown Battery to get money back on capital investments and increase our energy efficiency,” said Culbertson. “This has shown through employee participation in energy savings, and given Crown Battery the road map to energy savings success.”

And while many manufacturing companies will only consider investments that provide a one-to-two-year payback period, Crown Battery considers this approach shortsighted because energy savings provide benefits year after year.

“My advice to other manufacturers? You need to take advantage of this. Not only does it improve your facility, but it allows you to go to market cheaper than your competitors and it frees up money for other big capital improvements,” said Culbertson.

Established in 1926 Crown Battery has been manufacturing quality products for over 80 years. Crown Battery is privately owned, with corporate and manufacturing operations in Fremont, Ohio. The company’s operating principle “The Power Behind Performance,” represents Crown Battery’s commitment to providing power to millions of people around the world—power that makes life easier, and raises standards of living, health and safety for the communities Crown Battery serves.

T-shirts are provided to encourage staff to submit energy-saving ideas