Greenpac lines up savings with On-site Energy Manager

Case Study

Company Name: Greenpac Mill
Business Type: Linerboard Mill
Location: Niagara Falls, NY

Overview

Opened in 2013, Greenpac Mill is a state-of-the-art mill located in Niagara Falls, NY. Recognized for its high-tech equipment, sustainable manufacturing processes, and high-performance work organization, Greenpac manufactures lightweight linerboard made with 100% recycled fibers.

The mill has a strong commitment to sustainability, community engagement, and energy awareness and has been tracking key performance indicators (KPIs) in 10 separate categories, each with their own five-year goal.

- Energy
- Greenhouse Gas Emissions
- Residual Materials
- Water
- Sustainable Procurement
- Innovation
- Financial Performance
- Health and Safety
- Employee Engagement
- Community Involvement

Improving On-site Efficiency

Greenpac collaborated with the New York State Energy Research and Development Authority (NYSERDA) and its utility partners on many clean energy initiatives and strives for continuous improvement despite already being a new, high-efficiency facility. In an overall effort to continue to maintain and improve site operational and energy efficiency, Greenpac participated in NYSERDA’s On-site Energy Manager (OsEM) program from February 2019 through February 2020.

Greenpac contracted a part-time energy manager through CHA Consulting, Inc. to provide technical assistance, training, identification of opportunities, implementation of energy management strategies and projects, and verifying the results. The goal was to achieve a 5% reduction in electrical energy consumed.
87% of the goal was achieved during the 12-month period. 

“We saw our partnerships with NYSERDA and National Grid as an opportunity to exchange ideas and develop a culture of questioning our consumption. The goal was set at a 5% reduction in energy consumption.” — Craig Eddy, Project Leader-Operations

Manufacturing a Plan
A total of 45 energy conservation projects were identified with a wide variety of types and costs, including modifications to operational setpoint adjustments, refiner shutdowns, compressed air leak repairs, lighting replacements, valve upgrades and repairs, chiller optimization, and VFDs. Several of the initial projects were identified through the NYSERDA Strategic Energy Management Program Treasure Hunt, which helped uncover many great project concepts. The OsEM helped move these projects through the capital expenditure approval process, and in some cases, to final implementation.

<table>
<thead>
<tr>
<th>Energy Source</th>
<th>Installed</th>
<th>Approved &amp; Pending</th>
<th>In Development</th>
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<tbody>
<tr>
<td>Electric kWh</td>
<td>9,281,950</td>
<td>19,097,402</td>
<td>6,456,626</td>
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Packing Results
An overall reduction of 7.1% in average kWh/ton was attained at the end of the 12-month On-Site Energy Manager period. The mill is slated to continue this reduction trend through 2020. Additionally, the OsEM assisted in the approval of three key projects to be installed Q3 2020.

The NYSERDA On-Site Energy Manager Program
Through the On-site Energy Manager (OsEM) Pilot Program, NYSERDA cost-shares up to 75% of the cost to hire an OsEM. OsEMs work with companies to develop and implement successful energy and productivity projects. Projects may include operation and maintenance improvements, behavioral changes, energy efficiency upgrades, process improvements, throughput and scrap reduction improvements, and cost management.

Discover how to bring energy costs under control and improve profitability with NYSERDA. Visit nysераd.ny.gov/OSEM