

The Pactiv Corporation is holding the foodservice industry to higher efficiency standards.

Case Study

Company Name:
Pactiv Corporation

Business Type:
Foodservice manufacturer

Location:
Canandaigua, NY



Overview

The Pactiv Corporation is a manufacturer and distributor of food packaging and foodservice products, supplying packers, processors, supermarkets, restaurants, institutions and foodservice outlets across North America. Pactiv's facility in Canandaigua, NY is approximately 500,000 square feet with approximately 700 employees and operates seven days a week with three employee shifts per day. The process utilities that support manufacturing are compressed air, vacuum, tower water, chilled water, ventilation/exhaust air, and environmental air treatment systems.

In an overall effort to maintain operations and improve energy efficiency across the site, Pactiv partnered with CHA Consulting, an engineering and construction management firm, for a full-time, on-site energy manager through the New York State Energy Research and Development Authority's (NYSERDA) On-Site Energy Manager Pilot Program. A senior energy engineer was appointed to provide technical assistance, training, identify opportunities, implement energy management strategies and projects, and verify results. The program ran over a 15-month period from March 2017 through June 2018.

Course of Action

The energy manager assembled a team that represented each area or department of plant operations, including engineering, process technicians, utility technicians, production team leaders, and production mechanics. The team performed regular walkthroughs of the plant to continuously identify the best opportunities for equipment/facility upgrades. With a course of action in mind, the energy reduction goal was set to achieve a 4% reduction in energy consumed per pound of product produced.

To continue realizing energy savings, Pactiv shares lessons learned throughout all its plants across the U.S. to implement similar energy conservation measures.

A total of 18 energy conservation projects were identified, with several implemented to date—the remainder are under consideration with Pactiv’s management. The wide variety of projects include upgrades to grinder controls, lighting, and HVAC; addressing compressed air leaks; and improved manufacturing line performance, free cooling, and VFDs. Several of the measures also included recommendations on improving the zero-point energy of the plant, especially focusing on energy consumed while the plant is in a shutdown period.

Monthly meetings were held to focus on driving improvements including equipment reliability, yield, and throughput, and performance engineering solutions related to controls, technology, and sustainability. The energy manager, along with Pactiv’s direct supervisor and CHA’s principal, participated in monthly project management check-ins with NYSERDA. Other participants included some of Pactiv’s corporate energy staff and CHA energy engineers.

Results

Total annual electric savings for all projects identified is 12,771 MWh; for the projects completed or approved to date, the total savings is 4,473 MWh. Total annual gas savings for all projects is 2,140 MMBtu, with 2,119 MMBtu of those savings included in completed projects as of the end of the 15-month period.

Sharing Success

To continue realizing energy savings, Pactiv shares lessons learned throughout all its plants across the U.S. to implement similar energy conservation measures. As part of the program, the on-site energy manager participated in identifying and sharing best practices with other Pactiv facilities. Additionally, employee awareness training is conducted on a regular basis to ensure new policies and procedures are effectively communicated and put into effect throughout the company.

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.



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