

Gutchess Lumber reaps big savings with On-site Energy Manager

Case Study

Company Name:
Gutchess Lumber

Business Type:
Hardwood lumber

Location:
Cortland, NY

Overview

Gutchess Lumber, a 5th generation family and employee-owned organization, has been headquartered in Cortland, NY since 1904. The 526,000-square-foot facility processes northern hardwood logs into kiln-dried dimensional wood products used for cabinetry, flooring, furniture, architectural millwork, and more.

Gutchess manufactures 80 million board feet per year, making it one of the largest hardwood producers in the country. As an environmentally responsible company with a commitment to sustainability, finding ways to improve energy efficiency and overall operational management is a priority.

Building a Strategy

The hardwood lumber business can have large, unpredictable fluctuations due to supply and demand caused by the economy, the stock market, or weather—just to name a few. Reducing energy requirements and lowering overhead costs will ensure the company stays competitive far into the future.

In an effort to identify and quantify energy and cost-saving opportunities, Gutchess enrolled in the On-Site Energy Manager (OsEM) pilot program offered by the New York State Energy Research and Development Authority (NYSERDA).

As part of the program, NYSERDA provides a dedicated energy manager to deliver energy, process, and operational improvements directly on site.

Since NYSERDA cost-shares the OsEM fees, Gutchess had the opportunity to have an energy manager on a part-time basis for a year.

“I believe progressive companies will employ energy managers as a key component to controlling costs.”

— Ben Stuart, Plant Engineer



Logging Real Results

The goal of the OsEM was to save a minimum of 7.5% of the facility’s annual electric usage. Over the last contracted engagement, Gutchess began implementing the recommended Energy Conservation Measures (ECMs), which ultimately exceeded the original goal, resulting 10% overall savings. When Gutchess completes the remainder of the energy manager’s recommendations, the estimated savings are approximately 2.4 million kWh per year—equating to \$210,000—a 22% reduction. The measures expected to yield the largest savings are as follows:

Facility Lighting Upgrade

Replacing the existing lighting with new LED fixtures, or retrofitting with LED lamps and adding motion sensing controls, will reduce the facility’s lighting electric usage by more than 50%. The lighting upgrade also provides better light quality, increasing productivity and creating a safer workplace. Gutchess worked with National Grid to receive more than \$100,000 in incentives for the upgrade.

Compressor Line Repairs

An air leak audit was conducted throughout the plant, providing an accurate cost per leak analysis to determine savings. The leak repairs will save approximately \$62,000 with less than one-year simple payback.

Renewable Energy Projects

Converting the high-pressure steam produced by the boiler to low pressure using a back-pressure turbine can produce 2.3 MWh per year of electricity. Additionally, Solar PV is being evaluated, both for rooftop and a large ground-mount system. When combined, both systems would generate approximately 2.5 MW of electricity. These renewable energy projects are now being considered for the future by the Gutchess Lumber Board of Directors.

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, and profitability, under control with NYSERDA.

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