

Poulin Grain Produces Energy Savings

Case Study

FlexTech Consultant:
L&S Energy Services

Location:
Canton, NY

Sector:
Industrial

Building Square Footage:
39,000 sq.ft.

Annual Cost Savings:
\$15,350

Annual Energy Savings:
54,307 kWh

Annual Gas Savings:
9,398 Therms

Background

The Poulin Grain plant produces pellet feed for local farm animals. Their two pellet mills produce up to 6 tons of product per hour. The mills are powered by a natural gas steam boiler and the pellets are cooled by a large exhaust system. Poulin Grain noticed their natural gas costs rising, while their production totals were declining, so they commissioned L&S Energy Services to complete an energy study through NYSERDA's FlexTech Program, focusing on process improvements in the plant.

Poulin Grain invested \$4,443 into a FlexTech energy study with L&S Energy Services to discover opportunities that could save them \$15,350 in utility expenses each year. By implementing the energy efficiency upgrades recommended by L&S, Poulin Grain could:

- **Reduce annual utility costs by 13%**
- **Reduce costs associated with equipment operation and maintenance**
- **Completely payback money invested in recommended upgrades within 7 years.**

Taking Action

L&S observed the boiler was left in operation during the off-season, wasn't meeting load requirements, and associated piping systems weren't insulated. To identify the most effective system improvements, L&S conducted a technical and economic analysis considering install and maintenance costs, energy savings, cost savings, and simple payback.



NYSERDA-Approved FlexTech Consultant

Energy Savings Summary

Measure Description	Electric Savings (kWh)	Gas Savings (Therms)	Annual Cost Savings
LED Lighting Upgrades	33,706	-	\$3,481
Pipe Insulation for Steam Distribution	-	4,912	\$4,268
Boiler Controls	-	978	\$850
Boiler Feedwater Economizer	-	3,508	\$3,048
Variable Frequency Drives for Grain Mixer	20,601	-	\$3,703
Total	54,307	9,398	\$15,350



L&S staff have more than 150 years of combined experience providing energy services to thousands of facilities since 1976.

Achieving Results

As a conclusion to the energy study, L&S provided Poulin Grain with a report including recommendations to improve operations and reduce costs justified by technical and feasibility analyses. L&S identified opportunities to optimize building systems and production processes, with a focus on boiler operations. Among other suggestions, boiler controls, an economizer, and pipe insulation were recommended to improve process efficiency of the boiler and steam distribution.

The information and recommendations L&S provided allowed to Poulin Grain to make informed decisions that will result in the greatest energy and cost savings specific to their facility.

NYSERDA Flexible Technical Assistance Program

Completing an energy study of a building can help identify and evaluate opportunities to reduce energy costs and incorporate clean energy into a company's capital planning. Through the FlexTech Program, NYSERDA shares the cost to produce an objective, site-specific, and targeted study on how best to implement clean energy and/or energy efficiency technologies. A NYSERDA-approved FlexTech Consultant will work with businesses to complete the energy study and provide expert, objective and customized technical services to inform clean energy management and investment decisions.

Discover how to reduce energy costs and incorporate clean energy with NYSERDA.

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