



Refrigeration

CASE STUDY

HELPING MAINE BUSINESSES SAVE MONEY BY SAVING ENERGY



How energy efficiency helps Maine Wild Blueberry preserve a healthy product and healthy Maine jobs

Objectives:

- Reduce electricity usage and costs
- Maintain viability of operations in competitive market
- Meet corporate sustainability goals

Strategies:

With help from Efficiency Maine's business incentive program, Maine Wild Blueberry Company replaced its multiple Freon-based refrigeration units with a single new ammonia system.

Project Benefits:

- Saved more than \$171,000 in annual electricity costs
- Reduced maintenance costs
- Reduced load on fans and blowers
- Helped company maintain competitive pricing and continue employing 40 Maine workers

Wild blueberries are one of the world's healthiest foods, and the Maine Wild Blueberry Company is one of the world's leading suppliers. Their harvesting and processing operations provide much-needed jobs and tax revenues in Washington County.

Maine Wild Blueberry primarily uses the "individually quick frozen" (IQF) processing method to preserve the fruit's taste and freshness. A substantial amount of energy—more than 2.2 million kWh per year—was required for the initial freezing, storage in a 28,400 square-foot unit maintained at -15°F, and defrosting. So it's no wonder that in 2010, Maine Wild Blueberry began one of the largest conversions to energy-efficient refrigeration equipment in Maine's history.

Efficiency Maine's incentive of \$300,000 (the maximum allowable to one company in a year) was crucial to Maine Wild Blueberry's decision to invest nearly \$900,000 in replacing five existing Freon refrigeration units and air coils with a single, highly efficient ammonia system. In addition to cutting the freezing costs, the new system also produces hot gas that eliminates the need for electric defrosting.

The new equipment will help Maine Wild Blueberry save approximately 1.4 million kWh or \$171,000 per year, yielding payback on their investment in about 3.5 years...and helping ensure the continuation of hundreds of good jobs Down East.

"While our new equipment generates good energy savings, Efficiency Maine's incentive was a 'make-or-break' factor in our payback calculation, and our decision to make this new investment in Washington County."

*— Joe Comeau, Engineer,
Maine Wild Blueberry
Company*

Estimated Annual Savings

Electricity... \$171,000



Leading the Way to a Brighter Future

efficiencymaine.com
866-376-2463

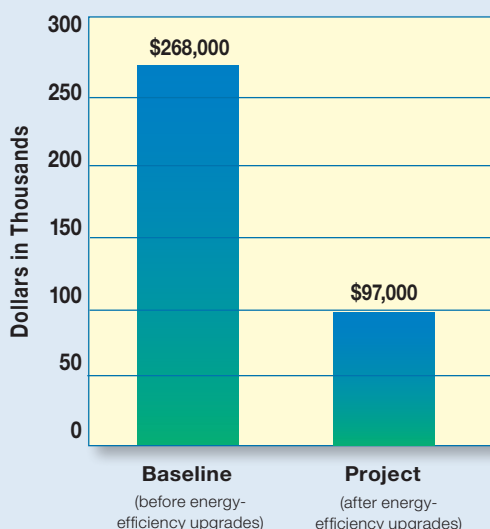


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Results:

Efficiency Maine estimates that the new refrigeration equipment will save nearly two-thirds of the energy previously used by the cold-storage units. Initial electricity bills during the first months of operation confirm this projection.

Estimated Annual Electricity Costs



Other Projects:

Maine Wild Blueberry Company's work with Efficiency Maine to boost energy efficiency began in 2006 with the installation of new lighting, and has also included a variable speed drive compressor.



Leading the Way to a Brighter Future

efficiencymaine.com

866-376-2463

Efficiency Maine is a statewide effort to promote the more efficient and cost-effective use of energy in order to save money for Maine residents and businesses, expand the economy and create jobs.



Financial Analysis

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| Project costs | \$892,743 |
| Incentive from Efficiency Maine | \$300,000 |
| Annual reduction in electricity costs | \$171,000 |
| Simple payback. | 3.5 years |

Project Team

- Maine Wild Blueberry Company and parent company, Oxford Frozen Foods
- Efficiency Maine
- RECCO (Refrigeration Engineering & Contracting Co., Inc.)

