

Manufacturing Facility Lighting

BETTER LIGHTING, LOWER ELECTRIC BILLS & REDUCED EMISSIONS

CASE STUDY

Objectives:

- Expand production area by 10,000 square feet while holding the line on lighting costs
- Improve rendering of paint colors on boats
- Lower electricity usage throughout the facility and reduce maintenance costs
- Reduce carbon footprint

Solutions

Energy Management Consultants, Inc. (EMC), a lighting energy services company and Efficiency Maine Qualified Partner, developed a comprehensive program of lighting upgrades:

- Replaced 400-watt metal halide fixtures throughout high-ceiling facilities with 6-lamp high-intensity fluorescent fixtures

See photo at right.

- Replaced fluorescent strip fixtures in fabrication and finishing shops with high-efficiency fixtures and reflectors

See photo on back.

- Retrofitted surface-mounted lighting fixtures in offices using High Performance T8 lamps and matching ballasts

- Added infrared occupancy sensor controls, directly mounted to each new high-intensity fluorescent fixture in storage sheds

Keeping expenses low and quality high at Morris Yachts

As a builder of high-end sailboats, Morris Yachts has always been energy-conscious. But the company's recent growth, along with the rising cost of electricity, gave them extra impetus to examine their lighting systems.



Cuyler & Tom Morris

Estimated Annual Savings

Electricity	\$15,400
Labor.....	\$ 1,000

"Upgrading our lighting and cutting our energy use is good for our bottom line—and it's the right thing to do. The lighting experts at EMC and Efficiency Maine made it simple from start to finish."

*—Cuyler Morris, President,
Morris Yachts*



Leading the Way to a Brighter Future

efficiencymaine.com
866-376-2463

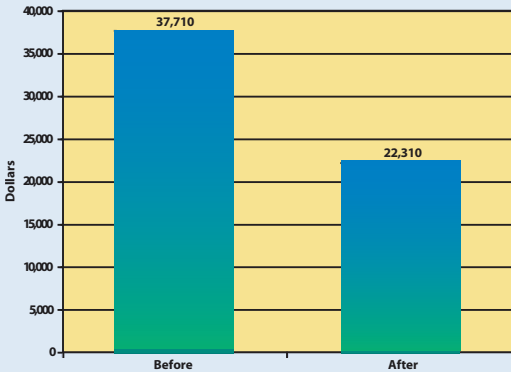


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The Plan:

Cuyler Morris, President, and Jeff Toman, Facilities Manager, worked with Energy Management Consultants (EMC), a lighting energy services company, to develop a comprehensive program of lighting upgrades. Efficiency Maine provided \$17,615 worth of incentives to help Morris Yachts purchase over 225 new high-efficiency lighting fixtures that were installed in the production, storage, finishing and office spaces.

Annual Lighting Costs



The Results:

Even with an addition of 10,000 square feet of space, Morris Yachts has held the line on electricity consumption, lowered maintenance costs and gained better color rendering—essential to customers buying \$100,000 yachts!



Leading the Way to a Brighter Future

efficiencymaine.com
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Efficiency Maine is a statewide effort to promote the more efficient use of electricity, help Maine residents and businesses reduce energy costs, and improve Maine's environment.



New High Performance T8 lamps in the refinishing shops enabled craftsmen to match customer's chosen paint colors more accurately than ever before.

Project Benefits

- Reduced electricity costs
- Longer lamp life, which reduced maintenance costs
- Improved color performance
- Eliminated long warm-up time of metal halide fixtures

Financial Analysis

Project costs	\$78,950
Incentives from Efficiency Maine	\$17,615
Estimated annual reduction in electricity costs	\$15,400
Estimated annual labor savings	\$1,000
Simple payback	3.7 years

Project Team

- Morris Yachts
- Efficiency Maine
- Energy Management Consultants, Inc., Qualified Partner