

HVAC, VFDs + Lighting

ENHANCED COMFORT, BETTER LIGHTING AND LOWER ELECTRIC BILLS

CASE STUDY



Variable Frequency Drives for chillwater pumps

Objectives:

- Create an environment that supports patient healing and employee productivity.
- Meet the air-temperature and humidity demands of surgeons, anesthesiologists and other providers.
- Reduce electricity usage and costs.
- Minimize the facilities' impact on the environment.

Strategies:

Franklin worked closely with Efficiency Maine, Qualified Partners and manufacturers to select the most energy-efficient lighting and controls, HVAC equipment and VFDs for water pumps and other motors.



Leading the Way to a Brighter Future

efficiencymaine.com
866-376-2463

Franklin Community Health Network: committed to a healthy environment and community

The new Medical Arts Center at Franklin Community Health Network in Farmington is designed to look like an old-fashioned Maine woods lodge. But in this new building—and the renovated main Hospital—

state-of-the-art technology is hard at work to save energy while delivering critical medical care:

- High-efficiency fluorescents provide all the lighting, with occupancy and daylight sensors to turn them off when they're not needed.
- HVAC systems use highly efficient motors, while delivering precise temperature and humidity levels to operating rooms.
- Variable-speed drives cut motor power consumption in half.

These energy-efficiency measures reduce Franklin Community Health Network's electric bills by 28%. With incentives from Efficiency Maine, they'll pay back in less than 6 months.

"Throughout our facilities, we've hard-wired in energy savings that will last forever. And Efficiency Maine has been a great partner: they were very responsive, and their field staff offered a lot of know-how and support."

—Don Garrison, Chief of Facility Management, Franklin Community Health Network

Estimated Annual Savings

Electricity.....\$45,576
Labor.....\$3,000



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The Plan:

High Performance T-8s and other fluorescents replaced the outmoded lighting in the main Hospital and an existing office building, and were used throughout the new Franklin Medical Arts building.

In addition, the new building incorporated energy-efficient HVAC systems that meet the exacting demands of medical professionals for humidity and temperature levels in operating rooms; and VFDs for water pumps and other motors.

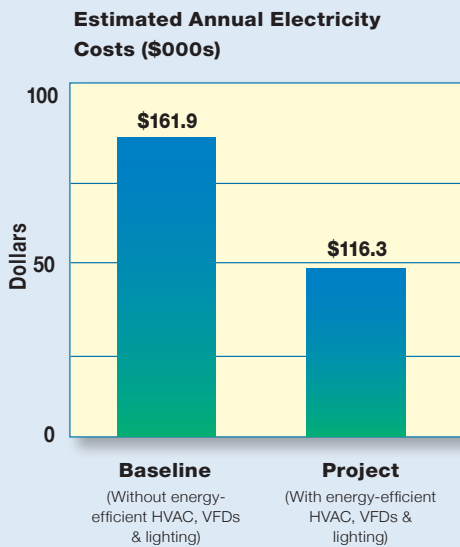
Results:

The Franklin Community Health Network campus uses 28% less electricity than ordinary buildings of comparable size, saving approximately \$45,576 per year, while supporting the organization's goal to reduce environmental impact and its primary mission: excellent healthcare.



New high-efficiency chiller

New high-efficiency boilers



Financial Analysis

Incremental costs for efficiency equipment	\$82,486
Incentives from Efficiency Maine	\$59,532
Estimated annual reduction in electricity costs. .	\$45,576
Estimated annual labor savings.	\$3,000
Simple payback of incremental equipment . .	5.7 months*

* Includes incentives from Efficiency Maine, and estimated electrical and labor cost savings.

Project Team

- Franklin Community Health Network
- Efficiency Maine
- Harriman Associates, Qualified Partner
- DeBlois Electric, Qualified Partner
- Gilman Electrical Supply, Qualified Partner



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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.