## CASE STUDY

# Multifamily

#### HELPING MAINE BUSINESSES SAVE MONEY BY SAVING ENERGY



## **Objectives:**

- Reduce energy costs for the building.
- Reduce electricity and fuel usage.
- Reduce building heating maintenance cost.
- Improve residents' comfort.

### **Strategies:**

- Engage a qualified program partner to develop an Energy Reduction Plan.
- Add spray foam insulation to basement wall and roof
- Seal air leaks
- Install ENERGY STAR®-rated windows
- Replace the boiler with a high-efficiency condensing boiler with added controls
- Insulate heating and hot water pipes



efficiencymaine.com 866-376-2463

# A Seven Unit Apartment Building in Bangor is more Energy Efficient and more Comfortable

### First Project Completed Under Multifamily Efficiency Program

It's widely known that Maine has some of the oldest housing stock in the country making many of the homes excellent candidates for energy efficiency upgrades. Efficiency Maine helps home owners and business owners throughout Maine improve energy efficiency by providing education and incentive programs to help fund qualified projects.

The Multifamily Efficiency Program is a new program that began in the summer of 2012 and serves multifamily buildings with 5 to 20 units, a market that previously had not qualified for incentives under other Efficiency Maine programs.

In November, the first project to receive incentives from the Multifamily Efficiency Program was completed – a seven unit building in Bangor. The building was constructed in 1912, and many of its original heating systems were still in use. Following an energy audit from Facility Management Group, Inc. in Dexter, computer models calculated that the building could reduce its overall energy use by more than 30% with some simple retrofit measures. By adding insulation, sealing air leaks, installing energy efficient windows and replacing the boiler with a high-efficiency condensing boiler, residents will experience improved comfort while the property owner experiences lower energy usage and utility bills.



# Multifamily



- The combined energy savings resulted in a 46% annual reduction in heating fuel oil usage, a savings of more than 1,600 gallons.
- An additional 550 kWh reduction in annual electricity usage is projected to yield a total annual savings of \$5,640 for the property owner.
- Payback for energy efficiency improvements of only 3.2 years.
- Residents report feeling warmer and more comfortable in their apartments.
- The building's benchmark score improved from 15 to 67 – upgrading its rating status from "least efficient" quartile to "very efficient" quartile.

## **Other Projects:**

K&C Properties has submitted five additional efficiency projects under the Multifamily Program.



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Efficiency Maine provides incentive programs and education to help Maine home owners and businesses save energy.



1/13 TRCBangorCaseStudy



### **Project Benefits**

Efficiency Maine provided cash incentives totaling \$10,500 toward these efficiency measures, reducing the project payback period from five years to three. The building improvements will result in an estimated 46% reduction in annual heating fuel oil usage and a 550 kWh reduction in annual electricity demand.

For more information on the Multifamily Efficiency Program, please visit: http://www.efficiencymaine.com/at-work/multifamily-efficiency-program or call 1-866-376-2463.

### **Financial Overview**

Project costs	\$28,582
Incentive from Efficiency Maine	\$10,500
Project cost net of incentive	\$18,082
Projected annual reduction in electricity and fuel costs	\$5,640
Simple payback	3 years

### **Project Team**

- Efficiency Maine
- K&C Properties, LLC
- Facility Management Systems, Inc.
- New England Spray Foam
- Withams Heating