

Union Square Apartments Windsor, Vermont



Project Type

Biomass Fuel Switch

Project Description

Union Square Apartments is a 58-unit apartment building located at 7 Union Street in Windsor, Vermont. Comprehensive energy efficiency opportunities were implemented several years ago. The facility currently burns 17,000 gallons of fuel oil annually to provide heat and domestic hot water, and the owner/manager will switch to a biomass boiler to reduce and stabilize long-term heat and hot water costs. This is a capstone project for the property; a final energy-related upgrade that was left undone after the retrofit.

Engineering and Design

Commons Energy will develop a full mechanical and controls bid package for the installation of biomass boilers and associated fuel and pumping systems along with controls and monitoring to provide remote access to valuable operational data.

Construction Management

Commons Energy will implement the building energy improvements, including work specification, bid solicitation and review, contracting, construction and project management, and building/system commissioning.

Project Partners

Housing Vermont, Windham and Windsor Housing Trust

Measurement and Verification

Commons Energy will monitor boiler system performance via remote monitoring and provide annual performance evaluation reports. Commons Energy will facilitate access to necessary training for facilities staff involved with the daily maintenance and operation of the new biomass system.

Project Financing

Lead underwriting provided by National Housing Trust Community Development Fund, with additional fixed-rate project financing provided by Commons Energy.

List of Improvements

- Biomass boiler replacement
- High performance circulator pumps & integral control VFDs
- Advanced controls & monitoring capabilities

Projected Savings

Even with current fuel prices, the project is expected to save \$20,000 per year in energy costs. The investment is expected to reduce long-term heating and hot water costs by more than 20%.