NH's Greenhouse Gas Emissions Reduction Fund (GHGERF)

Promoting a Green Economy & Energy Independence for New Hampshire

A CASE STUDY

Town of Temple, New Hampshire



Wayne Daniels, Ingram Construction Corporation, uses a fog tester to check newly installed windows for air sealing.

Renovations to the Town of Temple's municipal building/fire department are expected to result in an overall reduction in heating and energy use of between 75 percent and 85 percent. As a result, Temple will save between \$5,000 and \$6,000 annually, based on 2010 fuel prices.

Prior to the renovation, Temple's municipal building/fire department used 2,185 gallons of oil annually. The boiler was switched from an old oversized oil boiler to a high efficiency modulating condensing propane boiler. This change alone resulted in a 32 percent reduction in $\rm CO_2$ according to Coldman & Hartman Architects, the firm that provided savings projections based on field testing and data from actual consumption for a portion of the building's first heating season.

The building also received aggressive air-sealing and exterior super-insulation as part of the upgrades recommended by S.E.E.D.S, an independent energy contractor from Jaffrey, NH. An energy recovery ventilation system was also added – this, together with other upgrades,

reduced the CO_2 load by 81 percent, or 4.6 tons, from its baseline load.

The benefits of the Temple Eco Energy Committee's GHGERF funded project are far reaching. Coldman & Hartman taught the Ingram Construction crews the techniques of air sealing and other energy efficiency measures, providing the Swanzey-based company with valuable training in renovation work that reduces energy costs. The project provided work for 50-plus onsite workers for well over 4,550 hours.

In addition to the municipal building retrofit, Temple's Eco Energy Committee has facilitated the retrofit of the town library, developed and implemented energy-reduction workshops and winterization programs, produced a website on environmental news and energy information, and implemented a school recycling program.

The retrofits to Temple's municipal buildings have served the original purposes of the Regional Greenhouse Gas Initiative (RGGI) in New Hampshire – to reduce CO₂ emissions. In addition, the retrofit is greatly reducing fuel use and energy costs, helping to improve the NH economy, creating in-state jobs, and training trades people for jobs in a new clean energy economy.

"The value of the retrofit to the Town of Temple and its residents is immeasurable. Through reducing municipal energy usage, the environment is less polluted and the tax burden will be lowered for years to come."

> Bev Edwards Temple Eco-Energy Committee Town of Temple, NH