



## **Case Study**

### **Historic Restaurant**

Bennington, VT



#### **Application**

A restaurant kitchen in a repurposed horse barn in rural VT

#### **Location**

Bennington, VT

#### **Project Completion**

2019

#### **Overview**

The Publyk House, a restaurant in Bennington, VT, was first opened in an old horse barn almost 50 years ago, and has been called the most beautiful restaurant in Vermont. The owners recently undertook a complete energy efficiency retrofit in conjunction with Efficiency Vermont's Deep Energy Retrofit program.

#### **Original Equipment Replaced**

As is common in rural restaurants, the hot water heating system was fueled by propane, and was old and unreliable. Compounded by poor ventilation, an inefficient heating system, and outdated lighting, the owners realized that significant savings could be achieved with an upgrade of these systems.

## New Equipment Installed

The new hot water system included two 15,000 BtuH Sanden Heat Pump Water Heaters and two storage tanks, installed in the kitchen. One of the goals of the project was to reduce the carbon footprint of the business, and the low global warming potential of the CO<sub>2</sub> refrigerant in the Heat Pumps was an additional benefit.



In a later upgrade, the business installed solar panels, sufficient to meet their electricity needs during daytime hours, and they anticipate adding storage capacity in the future to reduce their dependence on the grid.

## Result

Propane use was decreased by 70%, or 3,600 gallons/year, and overall energy use was decreased by 52%, or 51,000 kWh/yr, although the Heat Pump Hot Water system is only one of several energy efficiency upgrades implemented by the restaurant. By installing the heat pumps in the kitchen, heat is extracted from the kitchen to produce hot water, effectively reducing the kitchen temperature and contributing to a more comfortable working environment as a by-product.

## Reference

See “[Publyk House serves up big savings with energy efficiency](#)” courtesy of Efficiency Vermont, and “[Publyk House reduces costs and saves energy with energy retrofit](#)” courtesy of Vermont Business Magazine.

## Disclaimer

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