

Success Story

Matirko Hardware Upgrades with Some New and Beneficial Hardware



SBDC client name: Christine Matirko
Company name: Matirko Hardware
Address: Route 940
City, State: Pocono Lake, PA
Zip code: 18610-9652
County: Monroe

Industry: Hardware Store

Year Founded: 1973

SBDC Assistance: Energy efficiency, geothermal HVAC unit installation, assistance in applying to the Small Business Advantage Grant

Environmental Management Assistance Program (EMAP)

Wilkes University SBDC
7 South Main Street
Wilkes-Barre, PA 18701-1706
questions@askemap.org
www.Askemap.org
SBDC@wilkes.edu



At the end of May 2008, while at a seminar at the Wilkes University Small Business Development Center (SBDC), small business owner Christine Matirko was introduced to the SBDC's Environmental Management Assistance Program (EMAP). A consultant at the conference informed her about the EMAP program and how small businesses could benefit from EMAP's free and confidential environmental consulting services. Ms. Matirko, owner of a small town hardware store, had wanted to perform energy upgrades to her facility but had many questions involving interior and exterior lighting upgrades, alternative energy systems, geothermal heat pumps, and available grant opportunities to help subsidize these projects.

The consultants at EMAP contacted Ms. Matirko shortly thereafter requesting a year's worth of utility bills and some background information about her building. After conducting a utility bill analysis, EMAP performed an onsite energy efficiency assessment where the consultants made practical and feasible recommendations that would improve the energy efficiency of the building and help reduce annual utility costs. EMAP then provided a detailed energy efficiency report, which included recommendations and estimates of potential savings and simple payback.

EMAP suggested that the store's lighting systems be upgraded from inefficient T12 fluorescent lamps with magnetic ballasts to high efficiency T8 lamps with electronic ballasts. In addition, EMAP suggested the replacement of all incandescent lights with high efficiency compact fluorescent lamps (CFLs) - a potential savings of over 5,000 kWh/\$430 a year.

EMAP also recommended the removal of the facility's oil-fired burner and the installation of a geothermal unit, which would not only eliminate the facility's use of high costing fuel oil, but also provide a more energy efficient means of heating and cooling the building. To help offset capital costs for the project, EMAP suggested they apply for a Small Business Advantage Grant (SBAG). This grant program is offered by the Pennsylvania Department of Environmental Protection and provides a 50% match, up to \$7,500, to help cover the costs of energy efficiency and pollution prevention project upgrades.

After Ms. Matirko obtained multiple contractor quotes to purchase and install a 7.5-ton Florida heat pump unit, the EMAP team assisted Matirko Hardware in submitting an Advantage Grant application. On October 15th, 2008, the project was approved for the full \$7,500 available from the Small Business Advantage Grant program. By June 2009, the geothermal unit was fully installed and running and Matirko Hardware was on its way to a more energy efficient future that included annual savings on its utility bills and the opportunity to finally "get off foreign oil."

The newly installed geothermal unit has eliminated the use of 1,154 gallons of fuel oil a year saving Matirko Hardware just under \$3,000 annually in energy costs. Excited about receiving the grant and with a better understanding on why it pays to become more energy efficient, Matirko Hardware has plans to move ahead with upgrading their lights. EMAP is continuing to work with this company to implement their efficiency recommendations and find additional funding opportunities for future projects.

Economics- Geothermal Unit Upgrade

Cost Savings	\$2,756 per year
Capital Cost	\$31,440 - \$7,500 = \$23,940.00
Payback	8.7 years

Pollution Prevention and Energy Efficiency (Annual)

Air Emissions(*)	134,501.3 lbs per year of greenhouse gases (CO2) 235.2 pounds of nitrogen oxides (NOx) 825.2 lbs pounds of sulfur dioxide (SO2)
Energy Use	86,775 kWh/yr

(*) Emissions result from reduced electricity usage.

Benefits:

Matirko Hardware's energy reduction benefits the environment as well with 3,461.3 lbs of Actual Air Emissions eliminated.

Currently, in June of 2010, Matirko Hardware is on their way to **saving an estimated \$2,756 annually in energy costs.** In addition to their savings, Matirko Hardware no longer relies on fuel oil as an energy source in their building.