

# New Hampshire Businesses Aim For Energy Efficiency

September 2010



Many business owners are preparing for their company's energy future. We help them identify and finance energy saving improvements..."

—Bob Reals, NH Division of Economic Development

**New England business owners** have long sought new and innovative ways to lower energy costs while also making thoughtful choices about energy efficiency.

The New Hampshire Business Resource Center (BRC) offers many programs and resources to assist New Hampshire companies with energy efficiency and pollution prevention.

One way the BRC works with businesses is by providing energy audits to help inform owners with ways they can improve productivity, and save money through implementing energy initiatives. Recently, the BRC through funding provided by the American Recovery and Reinvestment Act, conducted energy audits on ten New Hampshire companies seeking to implement energy measures. While these companies range from manufacturing to health care to entertainment, they all hold the common goal of finding ways to increase productivity and save money through implementing energy efficient improvements. The cost-saving use analysis includes: electricity, fossil fuel, water, wastewater, and renewables.

"All businesses need lighting, heating, air conditioning, power for office equipment and other services to stay in business," says Bob Reals, Business Energy Efficiency Manager, NH Division of Economic Development. Many business owners are being environmentally conscious and are looking for ways to adopt energy efficient technologies and green business practices. The Business Resource Center is focusing its efforts on helping businesses identify opportunities for making energy efficient upgrades. Our goal for the audits is to calculate cost savings from improved energy efficiencies and to assist these companies with finding available financing to make the recommended changes.

## About the Energy Audits:

To date, audits have been completed for the following companies:

- Velcro USA
- Hypertherm
- Schaefer Rolls
- Old Tyco, San Juan Reality Trust
- Concord Hospital
- PJ Noyes Manufacturing
- North Country Council
- Vitex Extrusion
- The PLUS Company
- Capitol Center for the Arts

The audits were completed by GDS Associates, Inc., an engineering and consulting firm. Several major activities were conducted in completing the audits including:

- Energy Usage Assessment
- Detailed Site Inspection
- Measure Analyses and Recommendations Development
- Investigation into Energy Efficiency Financing Opportunities

Contact the BRC at 603 271-2341 or visit [nheconomy.com](http://nheconomy.com) for information on how your business can benefit.



# Energy Audit Snapshot— The PLUS Company, Inc.

One company that is using the audit to explore & implement operational upgrades to their business is The PLUS Company Inc.

**The PLUS Company, Inc** works with individuals with developmental disabilities by providing support and services that maximize their independence. After nearly 40 years of pursuing this mission, The PLUS Company's dream of buying a new building became reality with the purchase of the building at 19 Chestnut Street in Nashua. The new building will allow the organization to grow and offer expanded programs and services. The PLUS Company realized the building was

not energy efficient prior to occupancy. The energy audit was completed on this building and The PLUS Company is currently renovating it to fit their needs. Part of the renovation includes three of the seven energy efficiency recommendations found in the energy audit. "We like the recommendations and they are very valuable especially as we have the ability to renovate this new space," said Brenda Merrill, Director of Operations at The PLUS Company.

Our first three goals are installing the recommended lighting, adding occupancy sensors, and programmable thermostats. Those measures alone will save us thousands of dollars each year."

—Brenda Merrill, Director of Operations at The PLUS Company

"As a non-profit, we want to spend our money wisely. We don't have the ability to completely pay for the energy project out of our operating budget, so we have

applied for financing through the NH Community Loan Fund's Enterprise Energy Fund, another American Recovery and Reinvestment Act funded project. Our first three goals are installing the recommended lighting, adding occupancy sensors, and programmable thermostats. Those measures alone will save us thousands of dollars each year."

## Overall Energy Recommendations and Savings:

During the site visit a number of potential building envelope, HVAC, lighting, and other electric efficiency improvement opportunities were identified and ultimately led to the selection of the seven energy efficiency measures. Estimated annual savings from the measures recommended are more than \$18,000 annually at current gas and electricity rates, or about a third of their current costs. These simple measures will save The PLUS Company an estimated 115,000 kWh of electricity and 500 therms of natural gas each year.

ID	Energy Efficiency Measure	Electricity Savings (kWh/yr)	Natural Gas Savings (therms/yr)	Cost Savings (\$/yr)	Installed Cost (\$)	Simple Payback (years)
<b>Building Envelope Measures</b>						
EEM-B1	Air Sealing	6,608	50	\$1,078	\$10,000	9.3
<b>Space Heating Measures</b>						
EEM-H1	Retrocommission HVAC System	16,520	126	\$2,695	\$13,320	4.9
EEM-H2	Programmable Thermostats	13,096	353	\$2,475	\$1,200	0.5
<b>Lighting Measures</b>						
EEM-L1	Lighting Efficiency Upgrades (T12 to T8)	29,272	0	\$4,475	\$20,020	4.5
EEM-L2	Occupancy Sensors in Offices	15,656	0	\$2,393	\$8,500	3.6
<b>Electric Measures</b>						
EEM-E1	Office / Cubicle Sensor Power Strips	22,894	0	\$3,500	\$11,000	3.1
EEM-E2	Solar Photovoltaic System	11,571	0	\$1,769	\$90,000	50.9
<b>Totals</b>		<b>115,618</b>	<b>530</b>	<b>\$18,385</b>	<b>\$154,040</b>	<b>8.4</b>
<b>Total Current Usage</b>		<b>330,400</b>	<b>2,524</b>	<b>\$53,891</b>		
<b>Savings Percentage</b>		<b>35.0%</b>	<b>21.0%</b>	<b>34.1%</b>		



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