

New Milford Public Schools

Energy Program Update

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October 2006 – September 2013



- * Maintain Comfort & Safety in Occupied Areas
 - * Coordinate usage of facilities and monitor operational efficiency of equipment vs. design
- * Eliminate Energy Waste
 - * Audit buildings during unoccupied times
 - Monitor building usage during occupied times
 - Track & analyze consumption for building efficiency
 - Use web-based tools & diagnostic loggers to track waste
 - * Maintain energy policy and guidelines
- Save Dollars
 - Minimize consumption and demand charges
 - * Audit and monitor utility bills & meters for errors or overcharges
 - * Evaluate usage trends for abnormalities



Measurement and Verification (M&V) Methods

- Measurement and verification (M&V)" is the terminology commonly used to describe the practice of measuring energy savings and verifying cost avoidance. Energy CAP 's Cost Avoidance module is an M&V tool.
- The U.S. Department of Energy recently headed an effort to develop a written standard to define and describe various M&V options. Energy CAP is considered an "Option C -- Whole Building" method of M&V under this standard.
- The standard, called the International Performance Measurement & Verification Protocol is U.S. Department of Energy document (DOE/GO-102002-1554)
- *Energy CAP is an independently owned and developed software product in full compliance with this government standard.
- New Milford Public Schools is a licensed User of the software tool.

Comparing Apples to Apples

In order to make a valid comparison between <u>consumption</u> in the Base Year and <u>consumption</u> in a Savings Year certain criteria must be taken into account.

- Changes in Weather
- Changes in Building Square Footage
- Differences in the length of the Billing Periods
- Special Adjustments (changes in equipment or programs)

The accounting program adjusts the Base Year <u>consumption</u> to reflect these changes and an Apples to Apples comparison is achieved.



Cost Avoidance by year in district (\$)

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COST AVOIDANCE

 $10/06 \sim 09/09$

\$1,078,857

 $10/09 \sim 09/11$

\$769,002

 $10/11 \sim 09/12$

\$ 426,431

 $10/12 \sim 09/13$

\$446,047

Total

\$2,720,337



Cost Avoidance by year in district (%)

YEAR	COST AVOIDANCE
10/06 ~ 09/09	19.13%
10/09 ~ 09/10	21.44%
10/10 ~ 09/11	23.23%
10/11 ~ 09/12	26.82%
10/12 ~ 09/13	28.17%



GOALS FOR THE CURRENT YEAR

- Work on applications for *Energy Star*[©] rating for each of our schools.
- □ Increase communication of savings per building, including cost avoidance dollars and percentages, with staff throughout the district.
- ☐ Attend the winter conference in January 2014.
- Redistribute policies and recommendations electronically to all staff.

