

Energy Conservation Programs for Businesses



APICS

November 8, 2006





Managing Energy Bills

- Energy prices have risen in recent years
- Many reasons – supply issues, rising demand, international events
- Higher costs impact homes, businesses
- Two main factors affecting energy bills:
 - Market prices for energy
 - Usage



Market Prices

- Cost of heating fuels at higher levels than a few years ago:
 - Natural gas supply 80% higher in 2005 than in 2003 (overall bills 50% higher)
 - Market prices so far moderating in 2006 (supply prices 20 percent less than 2005, YTD)
 - Electricity prices variable, but affected by fuel costs, demand & supply
- Future? Energy prices are market driven, set by supply and demand, and political/international events



Usage

- Usage a factor of weather, habits, necessity (e.g. needs of business or home)
- Weather impacts both usage and market prices (e.g. cold weather raises usage; higher demand also raises market prices)
- We can manage at least a portion of our energy usage.



Energy Conservation

- Can take proactive steps to manage energy bills through conservation
- Start with the many low and no-cost ways of saving energy
- Then, optional energy-saving investments (such as upgrading heating systems, windows, etc.)
- But – where to start?



Commercial Energy Audit

- Offered by New York State Energy Research & Development Authority (NYSERDA);
- Complete energy analysis of business is conducted;
- Audit includes building envelope analysis, heating/cooling systems, lighting (including exit signs), processes (e.g. motors, machinery, refrigeration equipment), water heating, etc;
- Potential savings varies with each business.



Commercial Energy Audits

- Audits conducted for a fee by companies under contract by NYSERDA;
- Audit report will be furnished, outlining recommended energy conservation measures;
- Any contractor of the business owner's choosing may implement the conservation measures.



Audits Fees

- Fees are based on annual electric bills:

Annual Electric Bill	Energy Audit Fee
Less than \$12,000	\$100
\$12,000 - \$75,000	\$400

Electric bills must be less than \$75,000 to participate.

Audit fees are refundable when recommendations are implemented.

Fees are subsidized by NYS; actual audit costs range from \$1,000 and higher.

Audits in Dutchess County conducted by Landsberg Engineering; in Ulster and Orange Counties, TRC Solutions.



Sample Savings

Description	Cost	Savings	Payback (years)
Upgrade lighting	\$2,861	\$683	4.2
Improve Programmable Thermostat	\$230	\$722	.3
Install High-Efficiency Motors	\$8,738	\$1,378	6.3
Install LED Exit Signs	\$400	\$103	3.9
Totals	\$12,229	\$2,886	4.2



Audits – How to Apply

- Fill out 1-page form and mail or fax to auditor, or apply on-line;
- Or contact the local NYSERDA Energy Smart office in Kingston (331-2238);
- More information available at:
www.nyserda.org/programs/energyaudit.asp



Energy Audit Incentives

- Low interest program:
 - NYSERDA offers an interest rate reduction program on loans for certain energy efficiency equipment or improvements: 4% reduction for loans up to 10 years for up to \$1.5 million;
- “Smart Equipment & Lighting Choices” rebate program
 - Offered for certain types of high-efficiency equipment, including lighting, motors, and heating & cooling systems.



Other NYSERDA Programs

Visit www.NYSERDA.org/programs

- For new construction
- For existing construction
- Manufacturing and Industry
- Includes:
 - Green Building Programs (tax incentives, technical assistance)
 - Peak Load Reduction
 - PV Incentives (for solar systems)
 - Much more at www.NYSERDA.org/programs



Customer Choice Program

- Can purchase natural gas and/or electricity from approved suppliers rather than from Central Hudson;
- Central Hudson remains the delivery company;
- Potential savings will vary; not necessarily the least-cost option; product choices variable, indexed, fixed.
- Investigate term, conditions, pricing programs;
- Back-out credits: \$.003/kwh for commercial bus.
- Sales tax exemption on delivery portion



Customer Choice Program

- **Central Hudson's Market Match Program**
- An online service to assist business customers who are seeking to purchase gas or electric supply from independent suppliers;
- Available to commercial and industrial customers having at least 100 kW of electric demand or 2500 MCF of natural gas consumption per year;
- You provide the required information for your account via the Market Match website. That information and details of your usage history is shared with qualified energy marketers through a secure website. The suppliers who wish to make an offer to serve your business will contact you directly to discuss the available offers.



Energy Saving Tips

Energy Saving tips for businesses

- raise **thermostats** several degrees
- use fewer **elevators**
- only use necessary **lights** and turn off lights when rooms are empty
- only use necessary **office equipment**
- make sure lights and office equipment are turned off at the **end of the day**
- make certain all **HVAC equipment** is running properly and efficiently
- activate **power saving features** on copiers, fax machines, and other office equipment
- replace incandescent light bulbs with **compact fluorescent lights**
- verify that **thermostats** are working accurately
- verify that your **building** is not cooling and heating at the same time