



Leading Energy Management Programs

2007 ENERGY STAR Partner of Year Award Winners

April 18, 2007

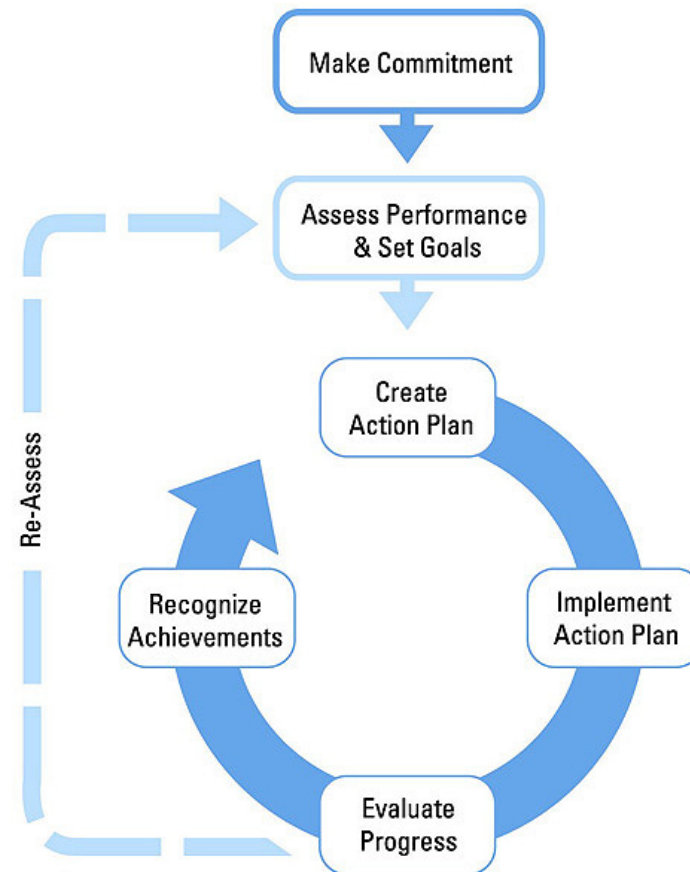
Call-in Number: 1-866-299-3188

Conference Code: 202 343 9965

About The Web Conferences



- **Monthly**
- **Topics are structured on a strategic approach to energy management**
- **Opportunity to share ideas with others**
- **Slides are a starting point for discussion**
- **Open & Interactive**



Web Conference Tips



- Mute phone when listening! Improves sound quality for everyone.
Use * 6 – to mute and # 6 to un-mute
- Hold & Music – If your phone system has music-on-hold, please don't put the web conference on hold!
- Presentation slides will be sent by email to all participants following the web conference.

Today's Web Conference



- Welcome
- Background
- Bill Good – Davenport Community School District
- Mike Culver – JCPenney
- Announcements



Recognizing Performance



- Facility Level – ENERGY STAR Label
- Portfolio-Wide Improvement – ENERGY STAR Leader
- Organizational Management & Leadership – ES Award



ENERGY STAR Awards



- Across all partnership categories
- Large and small organizations
- Public Institutions and corporations



Awards

- Energy Management
- Service & Product Providers
- Energy Efficiency Program Delivery

Award Categories

- Partner of the Year
- Corporate Commitment
- Sustained Excellence



Energy Management Award



Recognizes:

- Significant energy improvements in 2006
- Demonstration of continuous energy improvement
- Strong organization commitment to energy management and efficiency
- Well designed and managed energy programs that are integrated across the organization
- Active participation and leadership within the ENERGY STAR Partnership



2007 Award Winners



Sustained Excellence – Energy Management:

- 3M
- California Portland Cement Co.
- Food Lion
- Giant Eagle
- Marriott International Inc.
- New York-Presbyterian Hospital
- Toyota MMNA
- Transwestern Commercial Services
- USAA Real Estate Company

Partner of Year – Energy Management:

- Davenport Community School District
- Ford Motor Company
- JC Penney Company Inc.
- Jones Lang LaSalle
- McDonald's USA
- Merck & Co. Inc.
- Pepsico
- Raytheon Company
- San Diego Unified School District
- Seaford School District
- Shiners' Hospital For Children - Houston



Great leaders don't just lead.
They inspire.

3M
Advantix I3
AGA Foodservice Equipment
Anderson Homes, Inc.
Arizona Public Service (APS)
Ariosa Home
Austin Energy
Bak Ward Companies
Boach Home Appliances
Boys and Girls Clubs of America
Building Owners and Managers Association (BOMA) International
California Portland Cement Company
CenterPoint Energy
CMT Manufacturing, Inc.
Community Housing Partners Corporation
Covington Community School District
David Powers Homes
Efficiency Vermont
Eco Homes
Enbridge
Ford Lion, LLC
Ford Motor Company
GE Consumer & Industrial
Georgia Power
Glenn Engineering, Inc.
Gorham Properties, Inc.
Homes Properties
Hobas Homes, Inc.
Houston Habitat for Humanity®
J.C. Penney Company, Inc.
Jones Lang LaSalle
L. Homecare Homes - Minnesota Division
Leidos Industries, Inc.
Long Island Power Authority
Louisiana State Housing Authority
Lowe's Companies, Inc.
Mars International, Inc.
McDonald's USA
Merck & Co., Inc.
MetLife
MetLife Marketing Group

Nevada ENERGY STAR Partners
New Jersey Green Homes Office - NJ
Department of Community Affairs
New York State Energy Research and
Development Authority
New York-Presbyterian Hospital
Northeast ENERGY STAR Lighting and
Appliance Initiative
Northwest Energy Efficiency Alliance
O'Donnell SYLVANIA
Pacific Gas and Electric Company
Palm Harbor Homes
Pella Corporation
Pennsylvania Housing Finance Agency
PepsiCo
Philadelphia Housing Authority
Precision Energy, Inc.
Progress Lighting
Raytheon Company
Rocky Mountain Power
State Water Resources
San Diego Unified School District
Schools for Energy Efficiency from Hillberg
Engineering, Inc.
Sea Gull Lighting Products, LLC
Seaford School District
Sevens Holdings
Shiners' Hospital for Children - Houston
Southern California Gas Company
The Commodore Corporation
The Home Depot, Inc.
The National Energy Education
Development Project
Toyota Motor Engineering & Manufacturing
North America, Inc.
Transwestern
TUD Electronics Company
USA Real Estate Company
Veridian Homes
Whitely Corporation
WineryPark Custom Homes
Wisconsin Focus on Energy

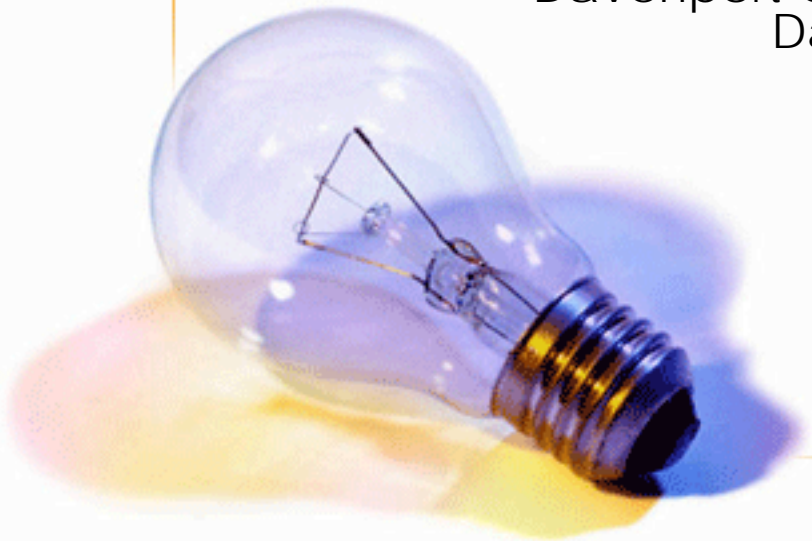
CONGRATULATIONS TO THE 2007 ENERGY STAR® AWARD WINNERS
For helping Americans save \$14 billion this year on their energy bills and preventing greenhouse gas emissions equivalent to those of 35 million vehicles, ENERGY STAR is a program of the U.S. Environmental Protection Agency and the U.S. Department of Energy helping us all save money and protect the environment through energy efficient products and practices. For more information, visit www.energystar.gov.



Saving Money for Students

Energy Conservation in the Davenport Community Schools

Bill Good
Director of Operations
Davenport Community School District
Davenport, Iowa



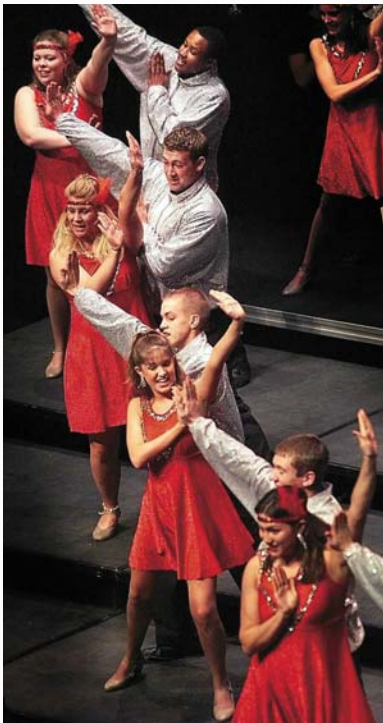


Agenda

- About Us
- The Challenge
- Energy Saving Steps
- Partnerships
- Meeting the Challenge
- Why



About the Davenport Schools



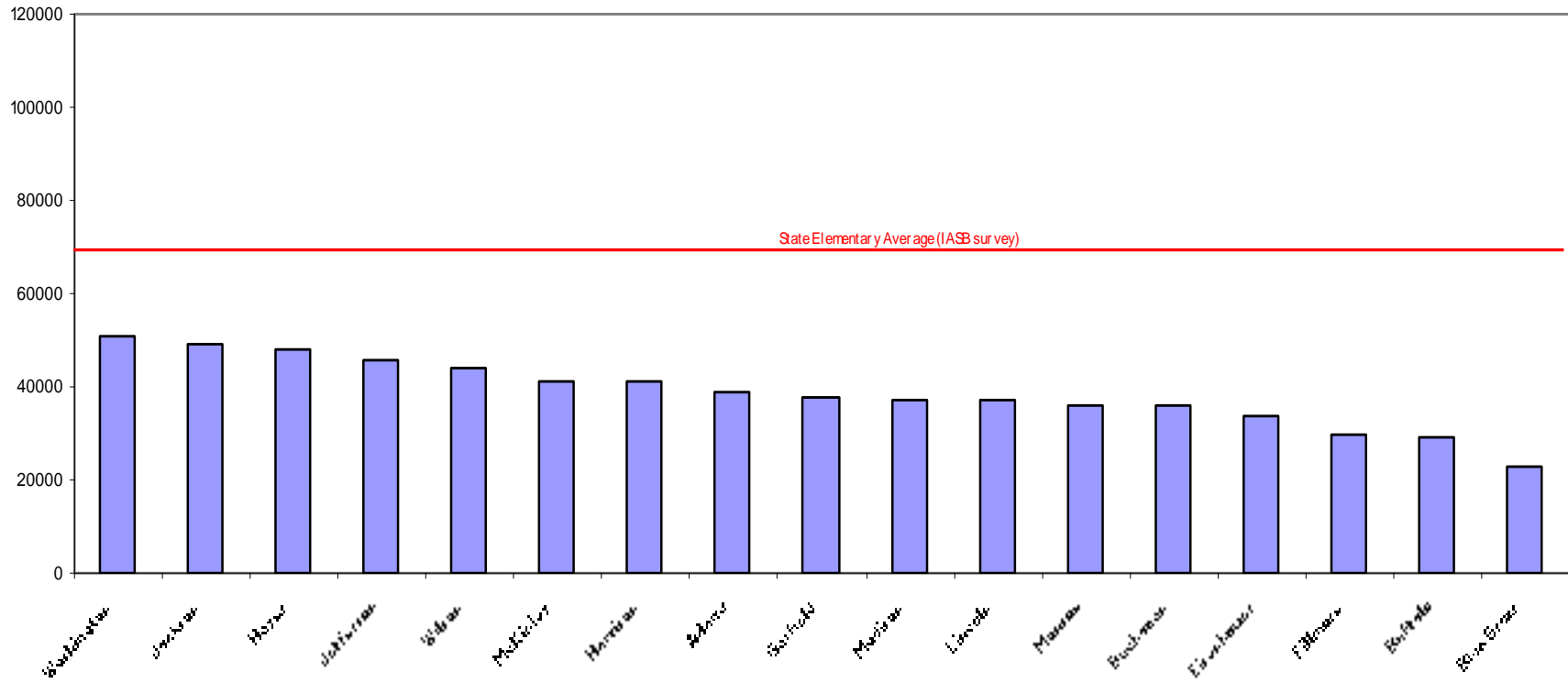
- 32 buildings
- 16,000 students
- 58% free or reduced
- 2.7M square feet
- Average age of our buildings exceeds 55 years
- Declining enrollment (reduced state aid)
- Dealing with higher energy costs



District Awards

- 1998 Green Lights Education Partner of the Year award
- 2004 Governor's Iowa Environmental Excellence award in energy efficiency/renewable energy
- 2004 Environmental Excellence award for energy efficiency from the Environmental Protection Agency.
- 2006 ASBO National Pinnacle of Excellence award winner
- 2006 EPA Leaders recognition in 2 categories
- 2006 – 27 of our 29 schools qualify for ENERGY STAR building labels
- 2007 EPA Partner of the Year for Energy Management

DCSD Elementary School Btu/ft² 05-06





Comparisons

- Median amount spent per student (K-12) on energy in '04-'05 - \$181.53

American School and University Magazine December 2005

- Davenport Schools - \$88.46 ('04-'05)



The Problem...or Opportunity

- Energy expenditures directly impact the general fund
- Dramatic increases in natural gas costs
- We continue to see state reductions... less money to accomplish our needs
- Recent and continuing staff reductions. Limited funds for supplies



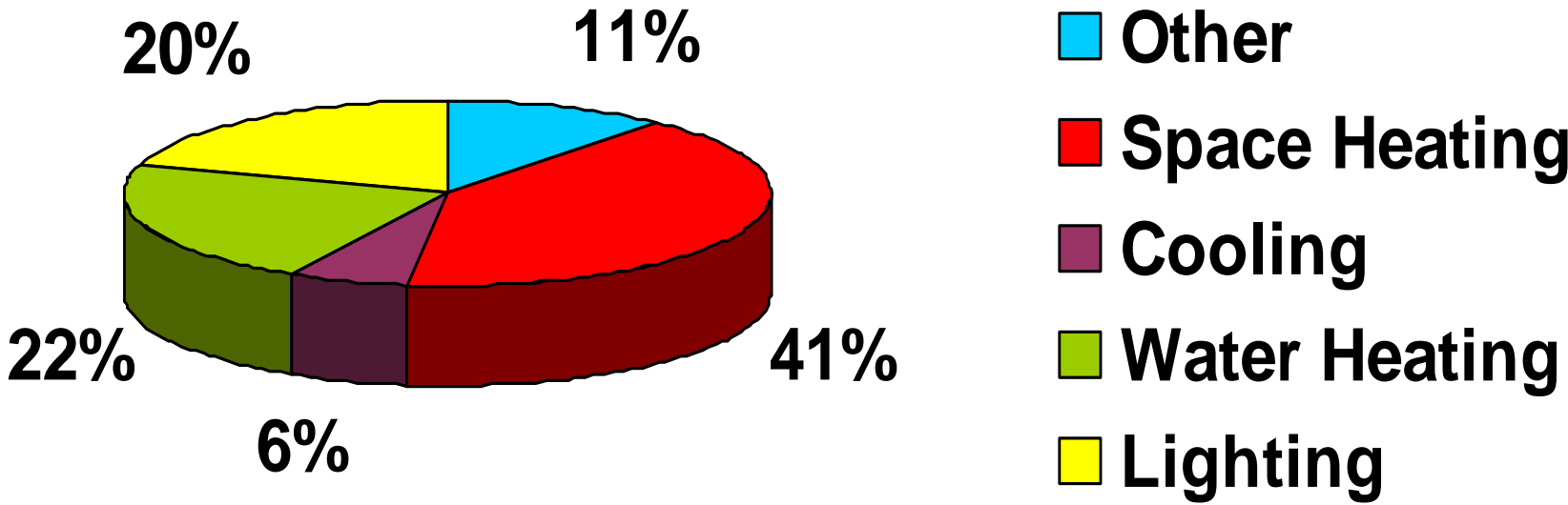
National data on energy use

- US Public Schools (K-12) spent \$9.9 billion on energy
- Energy use in Buildings from HVAC&R account for up to 64% of building energy use.
- Energy costs make up roughly 33% of (K-12) O&M budgets

American School and University April '05

- \$.60 of every dollar spent on energy leaves the state of Iowa

Site Energy Use in Educational Buildings





The Challenge

	Year	Private Company Projected Savings
	2003/04	\$ 179,800.00
	2004/05	\$ 226,300.00
	2005/06	\$ 266,675.00
	2006/07	\$ 311,910.00
	2007/08	\$ 516,225.00
	2008/09	\$ 570,186.00
	2009/10	\$ 630,995.00
	Total	\$ 2,702,091.00



Addressing the Challenge

- Everyone wants to save dollars
- Energy savings must be a priority
- Determine your own path (one size does not fit all)
- An organization must be committed from the bottom to the top. Forever...
- I love a challenge.....



Success steps

- Commitment
- ENERGY STAR Guidelines for Energy Management
- Creating teams
- ENERGY STAR label purchasing
- ENERGY STAR energy management assessment matrix
- ENERGY STAR Change a light campaign
- Automated Benchmarking





ENERGY STAR[®] Energy Management Assessment Matrix

	Little or no evidence	Some elements	Fully implemented
Make Commitment to Continuous Improvement			
Energy Director	No central or organizational resource Decentralized management	Central or organizational resource not empowered	Empowered central or organizational leader with senior management support
Energy Team	No company energy network	Informal organization	Active cross-functional team guiding energy program
Energy Policy	No formal policy	Referenced in environmental or other policies	Formal stand-alone EE policy endorsed by senior mgmt.
Assess Performance and Opportunities			
Gather and Track Data	Little metering/no tracking	Local or partial metering/tracking/reporting	All facilities report for central consolidation/analysis
Normalize	Not addressed	Some unit measures or weather adjustments	All meaningful adjustments for organizational analysis
Establish baselines	No baselines	Various facility-established	Standardized organizational base year and metric established
Benchmark	Not addressed or only same site historical comparisons	Some internal comparisons among company sites	Regular internal & external comparisons & analyses
Analyze	Not addressed	Some attempt to identify and correct spikes	Profiles identifying trends, peaks, valleys & causes
Technical assessments and audits	Not conducted	Internal facility reviews	Reviews by multi-functional team of professionals



Automated Benchmarking – Creating baseline

- Must know where you have been to determine how well (or poorly) you are doing.
- Validates your energy program through an objective third party
- EPA's Portfolio Manager provides numerous customizable reporting options
- Simplifies recognition opportunities
 - Leaders
 - Building Labels
 - Partner of the Year Award



District Energy Use Change by Site - Monthly Comparison

	Dec.	2006			Dec.	Base Year*		
Site	Electricity (kWh)	Natural Gas (Therms)	Total Energy (MBtu)		Electricity (kWh)	Natural Gas (Therms)	Total Energy (MBtu)	% Chg
Wilson	20,914	4,059	477		24,268	3,963	479	-0.40%
Garfield	16,957	3,955	453		20,001	5,314	600	-24.40%
Jefferson	19,997	3,764	445		10,239	6,291	664	-33.00%
Hayes	15,393	3,792	432		15,806	4,759	530	-18.50%
Harrison	18,987	3,250	390		14,097	3,311	379	2.80%
Monroe	18,442	3,144	377		15,133	4,970	549	-31.20%
Lincoln	9,650	3,182	351		9,893	4,076	441	-20.50%
McKinley	18,162	2,824	344		16,348	4,856	541	-36.40%
Madison	14,426	2,817	331		14,532	4,592	509	-35.00%
Eisenhower	15,780	2,428	297		20,329	3,184	388	-23.50%
Jackson	14,729	2,139	264		18,140	3,696	432	-38.80%
Washington	13,436	2,021	246		8,005	4,669	494	-49.80%
Adams	16,932	1,723	230		20,027	6,717	740	-68.90%
Blue Grass	15,054	1,690	220		16,729	3,224	380	-41.90%
Fillmore	12,026	1,467	188		16,833	2,696	327	-42.60%
Buffalo	32,684	615	173		49,225	401	208	-16.90%
Truman	47,204	106	172		107,859	1,829	551	-68.80%
Buchanan	32,816	72	119		22,145	3,767	452	-73.60%



Vending misers

- Estimated savings of \$150.00 per year per machine
- Installed over 100 district wide.
- Senses occupancy and turns off vending machine
- Not harmful to compressor
- District purchased - vendor installed.
- Received rebate of \$40.00 per unit





Classroom appliance energy costs

Under Counter Refrigerator- \$ 100.80/year (315 days)

Microwave- \$ 20.25/year (225 days)

Coffee Pots:

Burner only \$ 198.00/year (225 days)

w/ water reservoir \$1,156.05/year (315 days)

Energy Smart Schools Plug-Load Model

3.07

Average Electricity Cost = \$ 0.08 per kWh

Davenport Schools Model

Equipment	Quantity in Use*	Typical Use, Hours/Day**	Average Running Wattage	Cycle Time***	Monthly kWh	Months/Year	Yearly kWh	Annual Cost Each	Total Annual Cost
Coffee Maker	25	3	900	33%	446	9	4,010	\$12.83	\$321
Computer & Monitor ¹	90	8	140	—	3,600	9	32,400	\$28.80	\$2,592
Computer & Monitor ¹ (Energy Star) ^{****}	5500	8	140	—	110,000	9	990,000	\$14.40	\$79,200
Laser Printer ²	6	8	80	—	159	9	1,431	\$19.08	\$114
Laser Printer (Energy Star) ²	6	8	80	—	69	9	621	\$8.28	\$50
Copier 0-20 ppm ³	1	8	115	—	62	9	558	\$44.64	\$45
Copier 0-20 ppm (Energy Star) ³	1	8	115	—	36	9	324	\$25.92	\$26
Copier 21-44 ppm ³	1	8	177	—	110	9	990	\$79.20	\$79
Copier 21-44 ppm (Energy Star) ³	1	8	177	—	61	9	549	\$43.92	\$44
Copier >44 ppm ³	1	8	313	—	188	9	1,692	\$135.36	\$135
Copier >44 ppm (Energy Star) ³	1	8	313	—	141	9	1,269	\$101.52	\$102
Fax Machine ⁴	1	8	350	—	27	9	243	\$19.44	\$19
Fax Machine (Energy Star) ⁴	1	8	350	—	16	9	144	\$11.52	\$12
Fan	10	4	115	100%	92	9	828	\$6.62	\$66

Desk Lamp	30	5	75	100%	225	9	2,025	\$5.40	\$162
Microwave	15	0.5	1,000	100%	150	9	1,350	\$7.20	\$108
Tabletop Fridge (<2.5 cu.ft.) ⁵	5	24	—	—	125	9	1,125	\$18.00	\$90
Small Fridge (2.5-6.4 cu.ft.) ⁵	20	24	—	—	600	9	5,400	\$21.60	\$432
Television	25	3	80	100%	120	9	1,080	\$3.46	\$86
VCR	25	1	40	100%	20	9	180	\$0.58	\$14
Space Heater	20	7	1,500	20%	840	4	3,360	\$13.44	\$269
Window AC (9,000Btu/hr)	3	8	1,050	50%	252	4	1,008	\$26.88	\$81
Window AC (12,000 Btu/hr)	3	8	1,400	50%	336	4	1,344	\$35.84	\$108
Cold Drink Vending Machine ⁶	6	24	800	50%	1,751	12	21,012	\$280.17	\$1,681
Unrefrigerated Snack Machine ⁶	6	24	80	100%	350	12	4,202	\$56.03	\$336
Water Cooler ⁷	9	24	—	—	81	12	972	\$8.64	\$78
Water Cooler (Energy Star) ⁷	1	24	—	—	5	12	60	\$4.80	\$5
Other					-		-		
TOTAL					119,882		#####		\$86,264

Provided to Davenport Schools by Greg Coleman, TRC Energy Services



Mechanical and building upgrades

- Using internal rate of return/life cycle cost analysis
- District specifications were based upon Green concepts
- Renewable strategies
- Ventilation code requirements
- Changes resulting in lesser operational cost
- Retro commissioning





Partnerships





The power of “we”

- Monthly “energy awareness” meetings with controls company
- Monthly meetings with maintenance, custodial, and energy manager to review energy issues
- Direct relationship with MidAmerican Energy



Supporting Partners





Board Policy

BUSINESS OPERATIONS

Energy Use

The District is environmentally conscious and accepts responsibility for developing and enforcing programs and procedures which conserve energy and other natural resources. Optimizing existing funding sources through effective energy use is a priority.

The District will maintain an energy management program which will:
Decrease expenditures through energy cost savings, utility rebates, energy source purchasing plans, and building energy conservation measures

Provide guidelines for the purchase of energy efficient equipment

Encourage energy conservation understanding at all grade levels

Maintain a safe and healthy learning environment

Optimize the use of our energy resources

Comply with federal guidelines if applicable



Changing Behaviors

- Monthly energy tips sent district wide
- Student involvement
- Modeling energy savings
- Building audits
- Newsletters...student newspapers
- A new generation coming...wondering why we didn't





Beak 'n Eye



Vol. 42 Issue 6 West Coast Science May 20, 2004 \$3.00 Price \$20, 2004

Energy crunch

State budget cuts forces the district to cut back on unnecessary energy use

By Doug Cook
dcook@scs

That light that is left on when one leaves the room may seem harmless, but in the end it may mean the difference in a teacher getting a raise next year, or the district getting new textbooks or keeping the current and new ones from the past.

Energy use is directly related to these costs because funding for both comes from the same account. Last year the district spent \$1.9 million on heating and electricity.

"By cutting energy consumption, we will be able to save more kids, and money will not have to be cut elsewhere," said Debra Cooper, supervisor of support services.

Energy prices are on the rise. Costs for natural gas are up 20 percent over last year, and the State of Iowa cut Des Moines' budget by \$1.5 million.

The district is offering ways for schools to lower their consumption of natural gas and electricity by doing things as simple as turning off a light after leaving a room, or shutting a door during class to conserve heat.

West's energy conservation was up one percent from last year, and the district is hoping to lower that instead.

"West is a big consumer of energy because it is so large," principal Greg Meyers said.

More technology often times brings more energy use. For example, there are hundreds of computers at West that can be turned off when not in use.

"Energy conservation from computers and computer related equipment is directly related to the length of time the equipment

is on, regardless of whether or not it is being used... Contrary to popular belief, a computer is designed to be turned on and off without significantly impacting its life expectancy." Cooper wrote in a recent email to teachers and staff.

She also suggests using accessories and "sleep" modes with low activity, as well as not working multiple computers at one printer.

Vending machines costs can also add up over time because they contain lights and refrigerating mechanisms that consume electricity. For example, a typical vending machine consumes about 1,000 kilowatts per year—four times that of a residential refrigerator. There are six vending machines alone in the cafeteria.

However, devices can be installed to reduce these last expenses. The district installed about 100 vending machine meters in the last year, which are motion detectors that tell the machine when to begin cycling.

A thermostat monitor is to regulate a room's temperature, rather than opening a window or door to let in cool air. Doing so makes the school's heating system and air conditioning system work harder as it adds more heat to the room, which in turn consumes more electricity and natural gas. The staff was asked to report faulty thermostats to the heat division. In the future, all rooms' temperatures will be monitored by the district by using sensors.

Meyers asked that all teachers and staff do their part in reducing energy consumption in order to use money in a way that benefits them and learning.



Photo illustration by Debra Harkness

School tries many ways to conserve

By Amanda Sabin
asabin@scs

The principals from all Des Moines schools have come together to brainstorm ways to help conserve energy in our schools.

Teachers are encouraged to open blinds and turn off lights and to turn off electronics when not in use. If the lights were left on in a classroom for an extra two hours per day the added cost is almost \$18 per year. In an average high school, 60 classrooms would equal \$1,080 per year, just by leaving lights on in unused rooms for two hours.

Also, keeping classroom temperatures at 68-70 degrees and hallways at 65 degrees can reduce energy costs.

Classroom doors should be shut because the hallways are kept cooler than classrooms.

All fans in our classrooms should be left on so that there is a constant circulation level. Also, ceiling fans often have a reverse direction. Reversing the fan at a slow spring during heating periods would pull warmer air down from the ceiling, thus keeping the classroom warmer.

There have been several thoughts on increasing taxes to help raise the energy budget, as money will not be taken from other programs.

"I think although it would help, not only would it be hard to do, but we really raise the taxes enough as it is. I think we need to try other methods first," said Gwendolyn Marwick.

Right now West High School is unable to tell whether or not they have stopped within the budget until the final audits are complete and made available. The audits are comparing the energy usage for the 2002-2003 school year. Although conservation and summer school may influence these figures, it will give our school minimal and administration a good idea of how they're progressing toward their goals.

Although there is one thing that students can do to conserve energy, everyone can contribute toward things in the school to help the district conserve.

"Blustering more costs of things that you can do and making these strict habits would help the school tremendously," Meyers said.

Ways to save energy

- Wear appropriate clothing for seasons
- Keep classroom doors closed
- Don't obstruct ventilation systems
- Notify custodian if thermostat is working improperly
- Only persons with disabilities should use automatic doors
- Network printers, scanners, etc.
- Use energy efficient equipment
- Turn off fluorescent lights when not in use for more than five seconds.

Quad-City Times poll

February 2004
1,500 responses

Where is your home thermostat set this winter?

<u>Temp</u>	<u>Percent</u>
64 or lower	11%
65	7%
66	4%
67	5%
68	22%
69	8%
70	19%
71	5%
72	7%
73 or higher	7%

FINAL
EDITION

Weather/ A10

 **HIGH 81**
LOW 67

Quad-City Times

Tuesday, August 24, 2004

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HOMETOWNS

One man's journey
from jail to literacy
promoter shows the
ABCs to a better life
— Page A4

Schools save \$219,605 on energy

Davenport plan
continues this year

By Ann McGlynn
QUAD-CITY TIMES

Shutting classroom doors, turning off lights and installing energy-saving equipment saved the Davenport School District more than \$200,000 last year, money that will go toward educating students instead, the district's director of support ser-

vices said Monday.

Blue Grass Elementary School reduced its energy use the most, dropping its total by 31 percent, Bill Good said in awarding eight schools new computers.

"It was a team effort," said Jeanne Wolf, the principal at Blue Grass. "We worked really hard with the custodians and teaching staff. We really tried to educate the kids as well so they would snap those lights off if

they were the last ones out of a room, too."

Schools and district offices reduced energy use by 14.6 percent overall. The district avoided paying \$219,605, including energy cost increases and weather fluctuations, Good said. The actual dollar savings from the previous school year was \$130,119.

Officials also stepped up efforts to find energy rebates on equipment, he said. That tally is

nearly \$85,000. New windows, boilers and lighting paid for with tax dollars also contributed to the energy savings.

Good plans to continue the energy-saving program this year.

"We are not where we need to be concerning energy conservation," he said. "We have much work and education to do in that additional savings and maintaining savings are equally important."

Each winning school has a different tale.

At Eisenhower Elementary in Davenport, custodian Sally Ellis led the way by watching the use of lights and making sure doors were closed. At Fillmore, an energy audit found good conservation measures were already in place, but the principal and custodians lent "great support" to the effort to save even more.

Appliances were removed

ENERGY REDUCTION

Davenport public schools that topped the district's energy-reduction effort and their percentage of decrease:

Blue Grass — 31 percent
Eisenhower — 24 percent
Buchanan — 22 percent
Fillmore — 25 percent
Walcott — 18 percent
Williams — 19 percent
North — 25 percent
Jackson — 23 percent

Source: Davenport School District

ENERGY | A2

www.qctimes.com

ENERGY

Continued from Page A1

from classrooms at Buchanan, among other measures. The student newspaper at North High School published an article about energy conservation. New ventilation equipment and an

enthusiasm from the staff at North added up to 28 percent savings.

Honorable mentions went to the food service staff at Central High School, the night custodial staff and principal at the Kimberly Center, the staff at Wood Intermediate, the head custodian and principal at Lincoln,

the staff and principal at Wilson, the West High student newspaper and district employees Ethel Reynolds, Tom Hunt and Donna Cooper.

The idea of saving thousands of dollars on energy came after a company visited the district, promising to save more than \$200,000 per year in energy in

exchange for \$1 million over five years.

"Our district looked at this as a challenge to not only save the \$200,000 per year, but not pay the administrative costs," Good said. "We accomplished both."

Ann McGlynn can be contacted at
(563) 383-2336 or amcglynn@qctimes.com.



Awards for high achievers





Recognitions and Awards

- Energy attitude
- Actual building savings
- Sustained commitment
- Building creative measures
- Student awareness
- Community/facility use awareness



Meeting the Challenge

Savings projections by outside firm

2003/2004 - \$179,800

2004/2005 - \$226,300

2005/2006 - \$266,675

2006/2007 - \$311,910

Total - \$984,685



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Savings projections by outside firm

2003/2004 - \$179,800

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2006/2007 - \$311,910

Total - \$984,685

Annual savings by the Davenport Schools

2003/2004 - \$219,605

2004/2005 - \$374,114

2005/2006 - \$478,156

2006/2007 - \$483,775 (as of
2/07)

Total - \$1,555,650



Make a Decision for the Future

- We can make a difference for kids
- Decide saving energy is important
- **We have the responsibility**





Why Save Energy?



“The time to act is now, if we don't want our children someday to wonder, how could we have been so stupid?”

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If we can help or advocate....

Bill Good, Director of Operations

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DAVENPORT
COMMUNITY
SCHOOLS

Energy Management – from Strategy to Execution

**Mike Culver, P.E.
Energy Manager
JCPenney**

JCPenney

Every Day Matters[®]
jcp.com

Introduction

- **In 1902, James Cash Penney opened the first store in Kemmerer, WY**
- **1,033 Stores**
- **155,000 Employees**
- **Nation's largest catalog merchant of general merchandise**
- **Sephora – fall of 2006**
- **Ralph Lauren - 2008**

JCPenney

Every Day Matters[®]
jcp.com

The JCPenney logo is centered within a red square. The text "JCPenney" is written in a white, sans-serif font. The "J" and "C" are joined together, and the "P" is also joined to the "C". A small registered trademark symbol (®) is located at the bottom right of the word "Penney".

JCPenney[®]

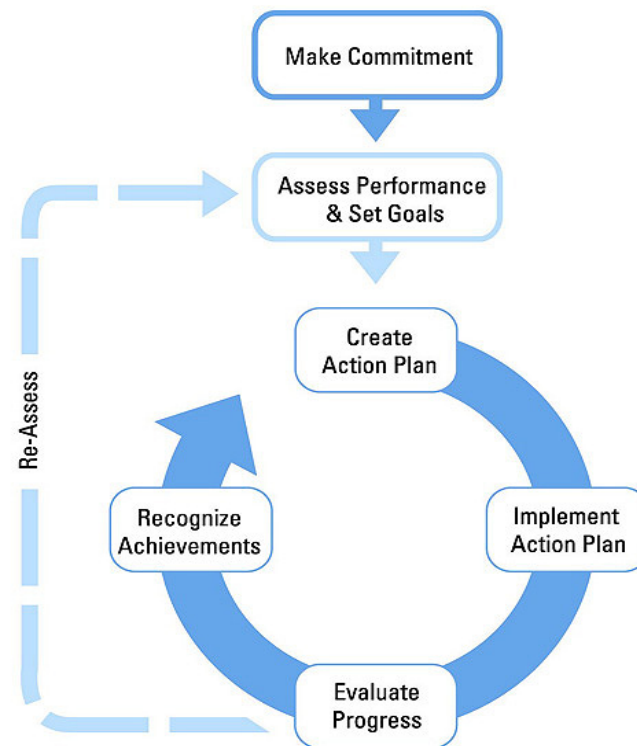
Every Day Matters[™]

jcp.com

The footer consists of a dark blue curved shape at the top, a thin red horizontal line, and a solid red rectangular area at the bottom.

Energy Star Partner

- Identify Internal Sponsor for Energy Star and your Energy Program
- Leverage Energy Star Recognition
- Utilize Programs
- Use as a Resource



JCPenney

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jcp.com

Energy Strategy

Enhance the customer experience through effective management of energy related assets and resources by:

- **Managing energy consumption**
- **Managing energy supply cost and risk**
- **Engaging associates**
- **Doing what is environmentally right**

JCPenney

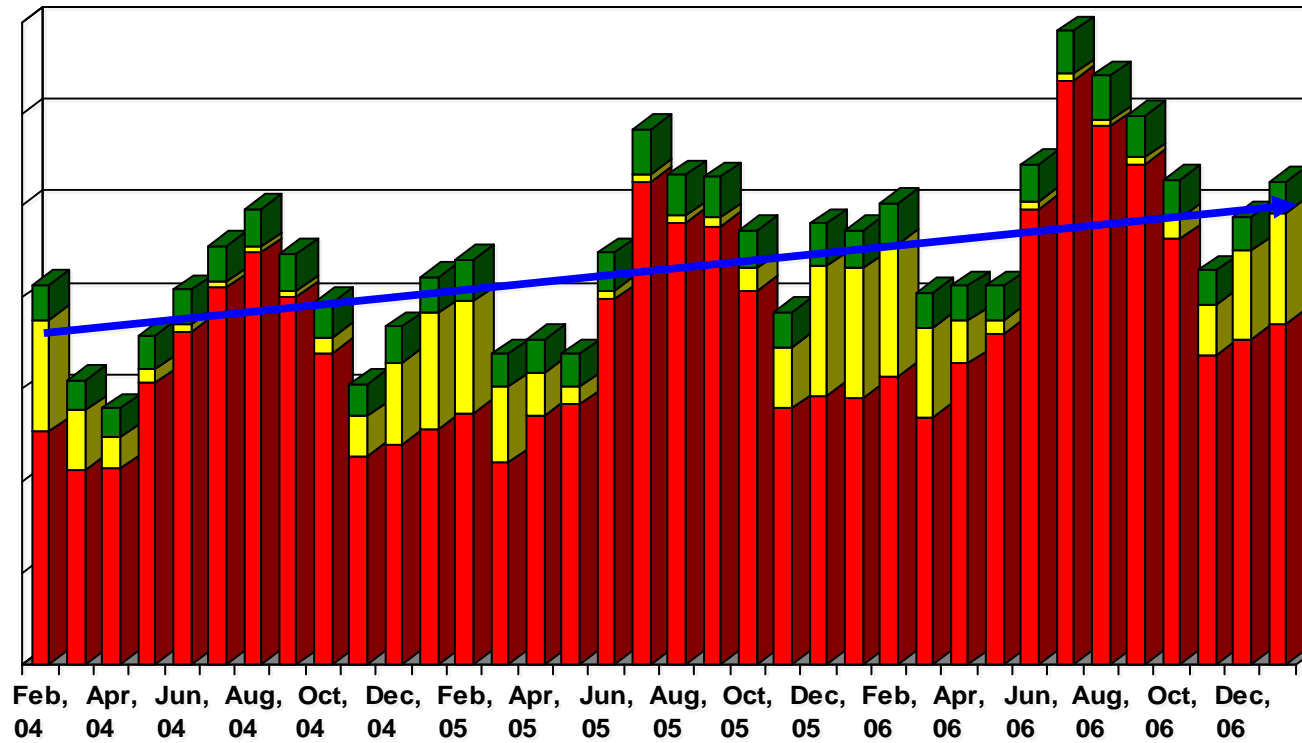
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**Managing energy
supply cost and risk**



Energy Cost 2004 – 2006 Actual



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Supply Execution

- **Clearly define internal responsibilities and procedures**
- **Leverage outside expertise**
- **Participate in and monitor all deregulated markets**
- **Take advantage of backwardation**
- **Pre-determine how you are going to enter a market**

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**Doing what is
environmentally
right**



Environmental Strategy

- **Investigate industry commitments**
- **Understand and provide input to corporate environmental policy and goals**
- **Determine scope of energy-related environmental goals**

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Environmental Execution

- **Building Design**
- **Recent hire of VP of Corporate Social Responsibility**
- **Bringing awareness to JCPenney Associates through Energy Initiatives**

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**Managing energy
consumption**

Managing Energy Consumption - Strategy

- **Energy conservation measures (ECM)**
- **Energy management information enhancement & utilization**

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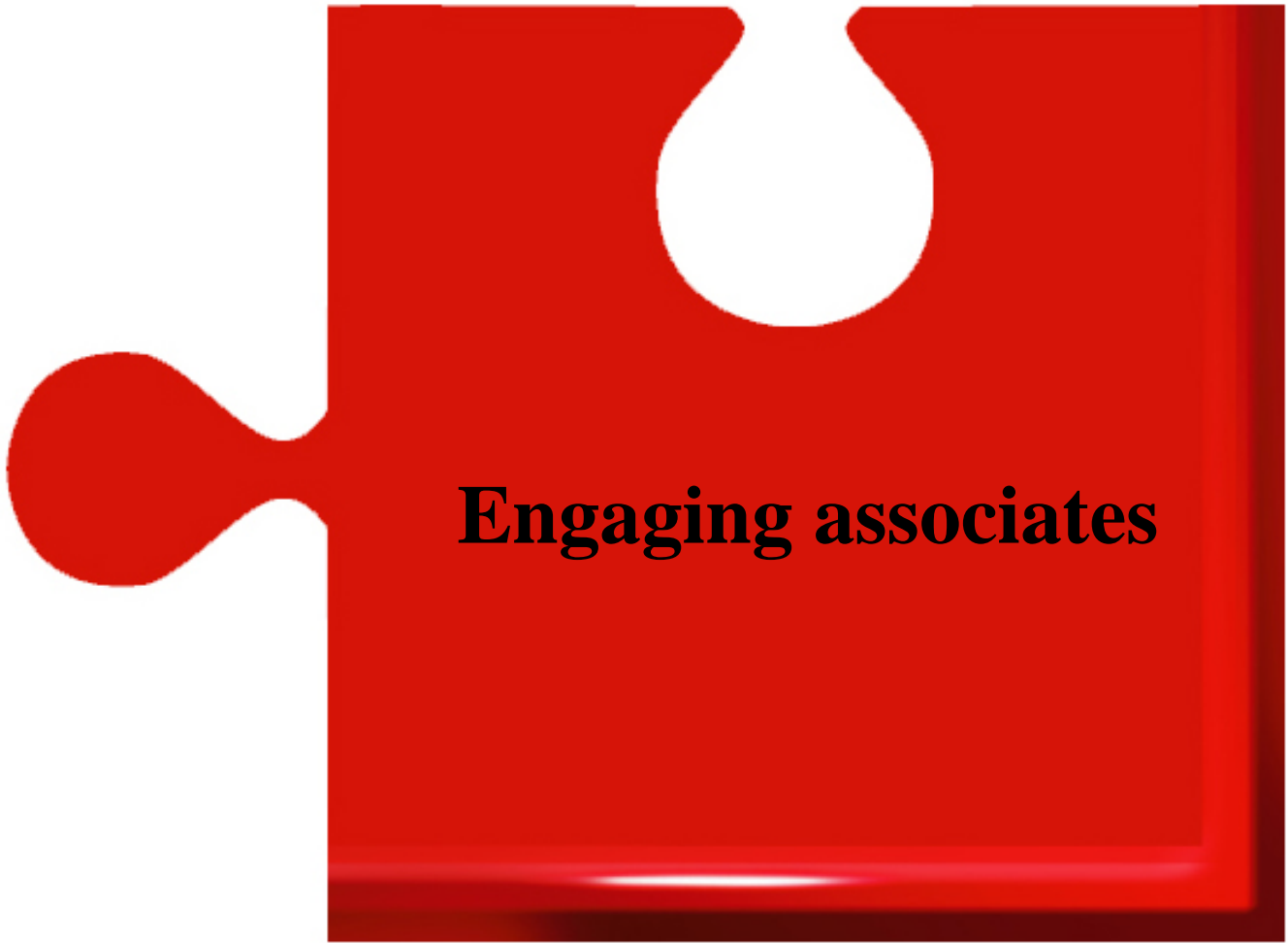
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Managing Energy Consumption - Execution

- **Group lighting retrofits with re-lamping program**
- **EMS initiative coupled with 24/7 Monitoring**
- **Easy to use systems and tools for all associates**
- **Constant review of new technology**

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Engaging associates



Engaging Associates - Strategy

- Year-round MUM program
- Energy Center
- Advanced Energy Management
- Energy Star

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Engaging Associates - Execution

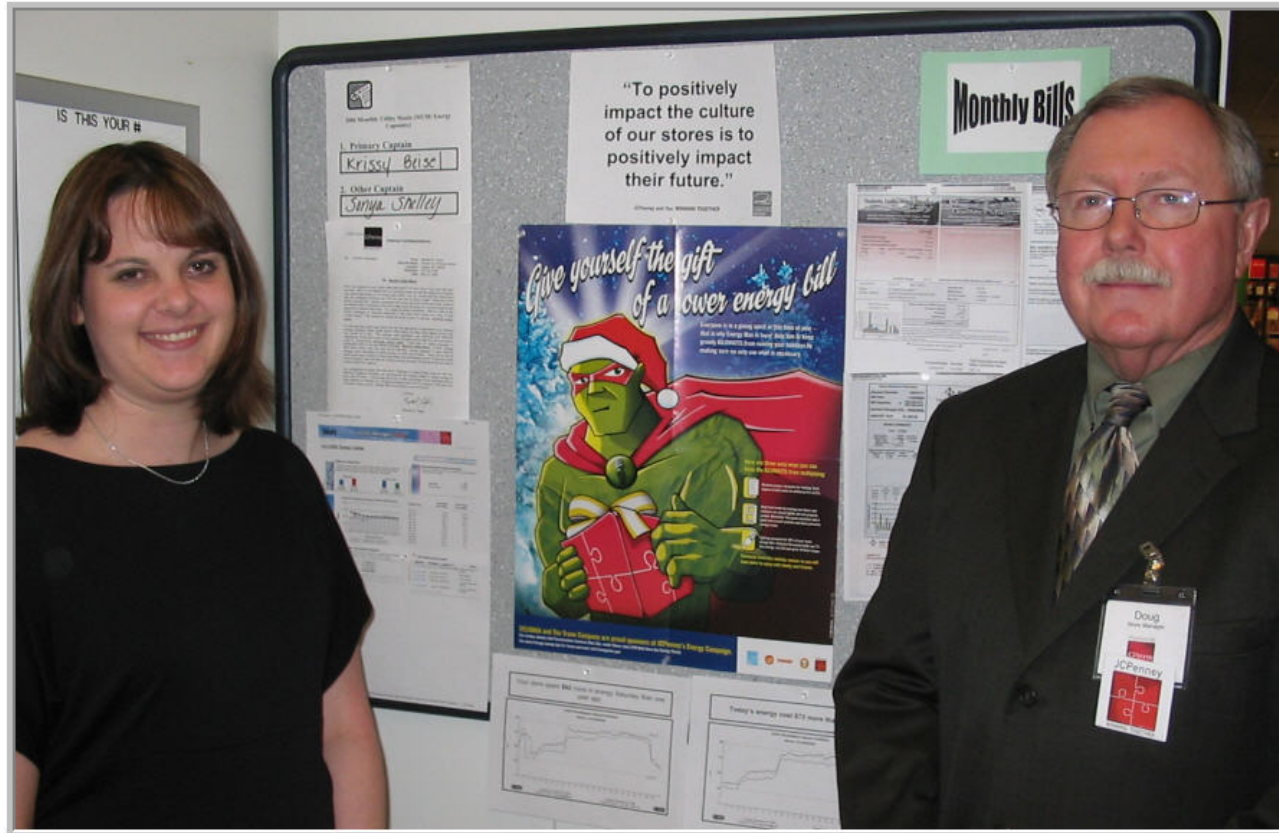
- **MUM – Behavior Program at the Store Level.**
 - 2004 March Utility Mania, \$500K Savings.
 - 2005 May Utility Mania, over \$600K Savings.

- **New MUM 2006 (Monthly Utility Mania)**
 - Ownership
 - Empowerment
 - Recognition
 - Rewards
 - Sustaining

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Engaging Associates - Execution



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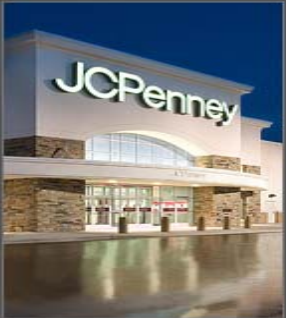
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Engaging Associates - Execution

it'sallinside
JCPenney **EnergyCenter** ENERGY CONSERVATION

Home | Energy Captains | Reports | News | Accounting | Capital Projects | Energy Team | Contact Us | History

Leadership Message
Comprehensive Solution
Energy Team
Environmental Impact
Our Corporate Success
Energy Star: "You Can Make a Difference"



Energy Star: "You Can Make a Difference" ENERGY STAR PARTNER

You are invited to join our JCPenney Associates ENERGY STAR Team and the ENERGY STAR Change a Light, Change the World Campaign. This is a national call-to-action from the U.S. Environmental Protection Agency (EPA) and the U.S. Department of Energy (DOE) to encourage every individual to help change the world — one lightbulb at a time.

For the first time, organizations have been invited to play a more personal role by setting their own pledge goal and inviting their community (JCP Associates) to join the larger ENERGY STAR Change a Light community.

Participation is easy. Just fill out the form below to make your pledge stating you will replace one lightbulb in your house with an ENERGY STAR energy efficient lightbulb. Together we will make a difference, so please join us in making JCPenney a leader in protecting our environment.

Thank you for your participation.

Take the Energy Star pledge to "Change a Light, Change the World!"


"I pledge to do my part to save energy and help reduce the risks of global climate change by replacing at least one light in my home with an ENERGY STAR qualified one."

I am pledging for the first time
 I am renewing my pledge this year

First Name:
Email:
Zip Code:

How many lights do you plan to replace with an ENERGY STAR? 1

Would you like to receive quarterly emails from ENERGY STAR with energy-saving tips? Yes No



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Advanced Energy Management

- **Initial Store Energy Audit and Review**
- **Engagement of all parties – Store Mgmt, Energy Team, Facility Maintenance, and Venders.**
- **Implement Best Practice**
- **Daily Review of IDR by Energy Captain**
- **Resolution of Issues**

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Advanced Energy Management

- **Developed Pilot**
 - **Small group of stores**
 - **Teamed up with local utilities**
 - **Learned best practices**
 - **Buy-in from Upper Management**
 - **Roll out to larger group and then company wide**

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Advanced Energy Management (Challenges)



- **Changing Store Hours**
- **Mechanical/Electrical Deficiencies**
- **Access to Interval Data**
- **Aligning goals of all parties involved**

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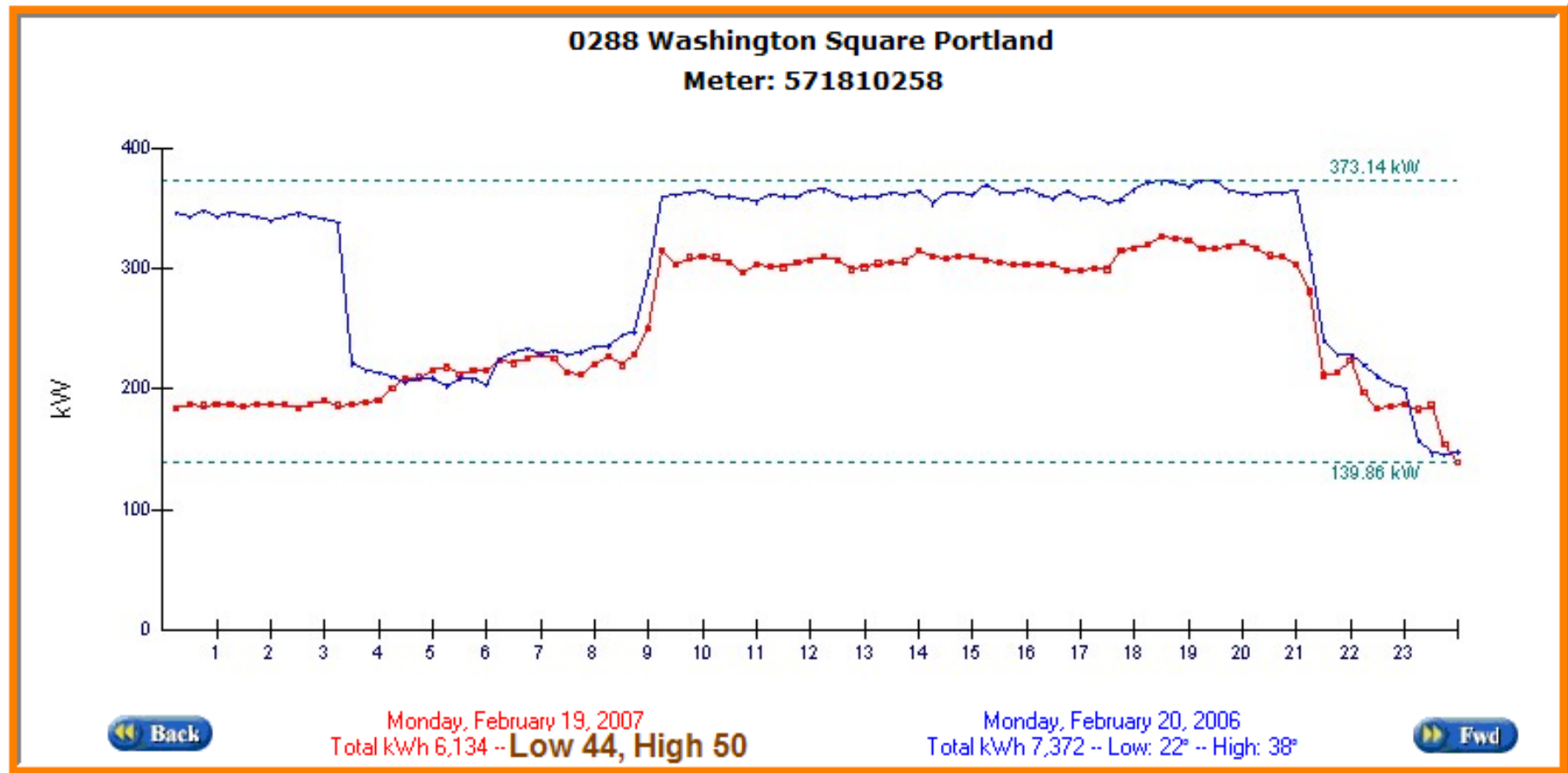
Advanced Energy Management



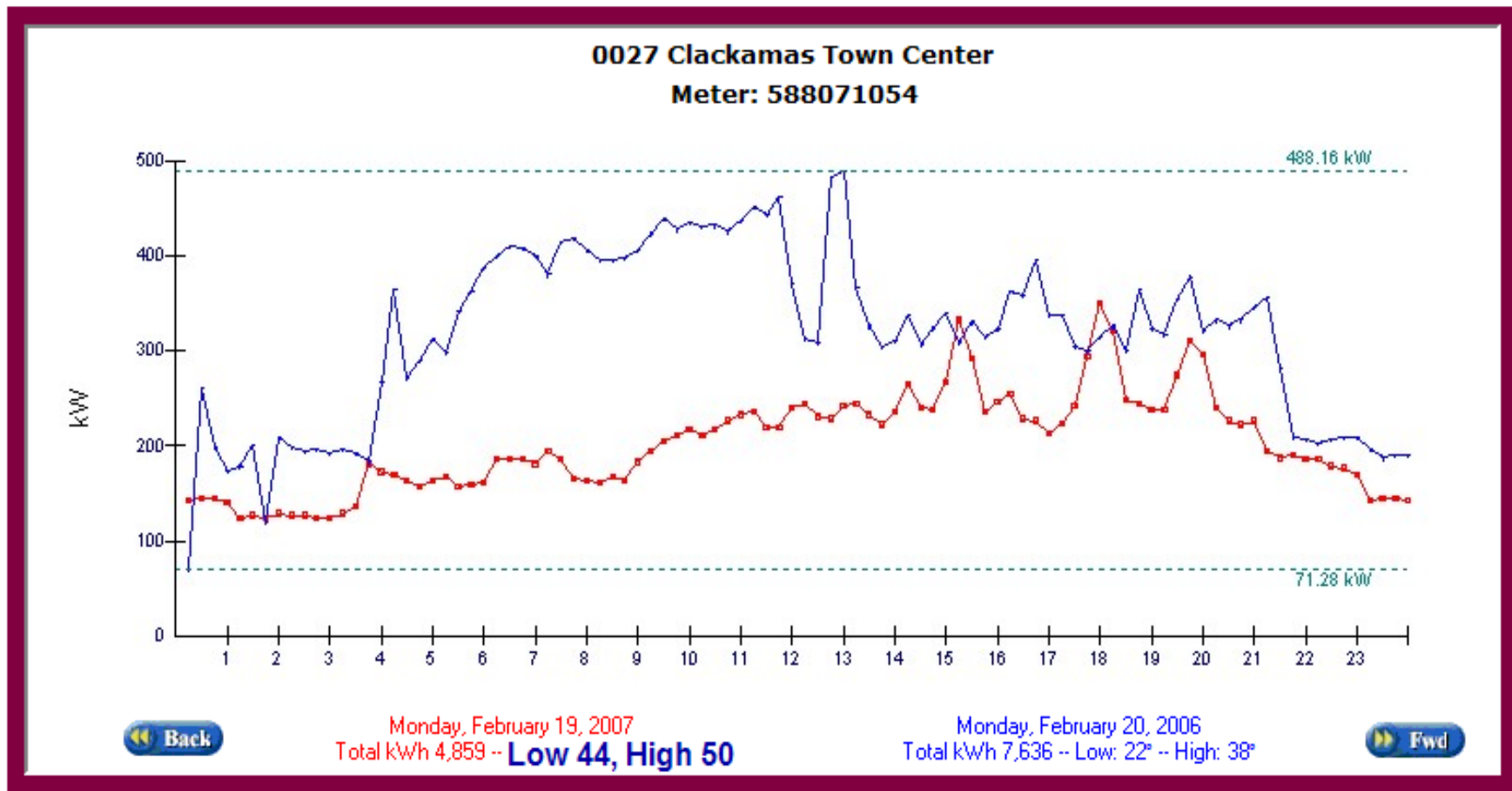
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Today's Energy Savings \$96



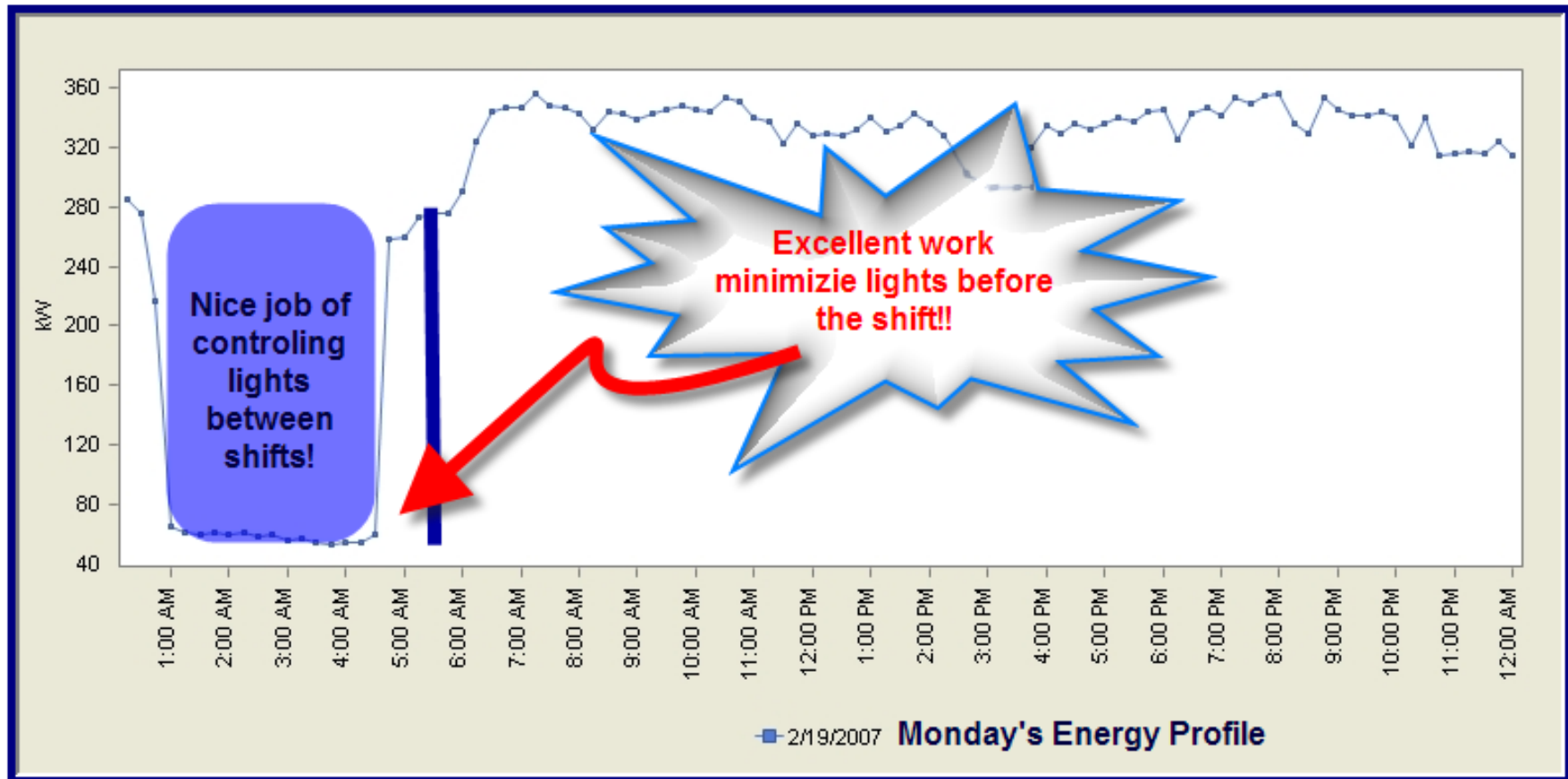
Today's Energy Savings \$216



Monday-Thursday

First Shift-5:30AM to 2:30 PM

Second Shift-3:30PM to midnight



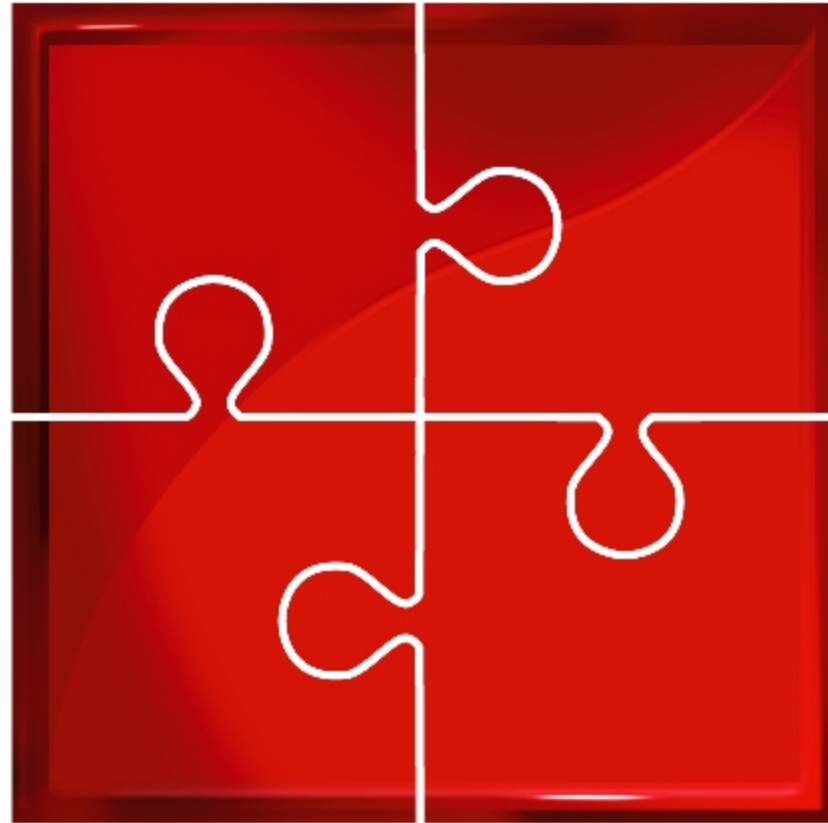
Energy Star POY



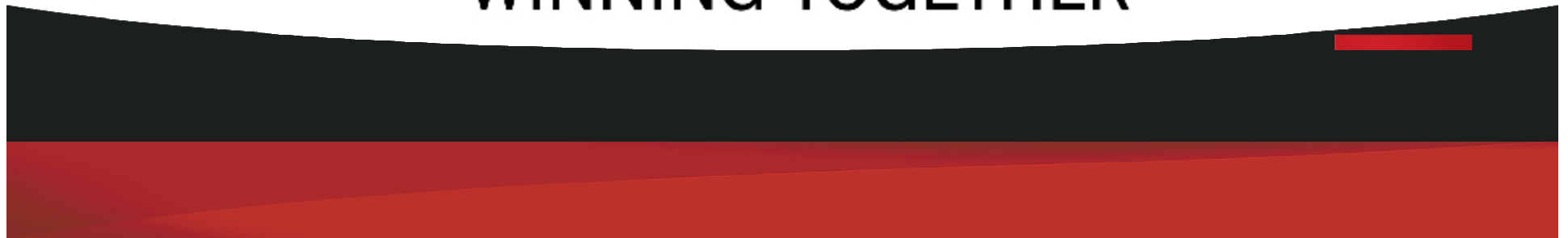
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WINNING TOGETHER





Questions & Discussion

Upcoming Web Conferences



May 17 – High Performance HVAC

June 21 – Day lighting

July 26* – Using Energy Information
Services Strategically

August 16 – State-of-the-art Sub Metering

Download past web conference presentations at:
www.energystar.gov/networking



Thank You!