



ENERGY STAR 2006

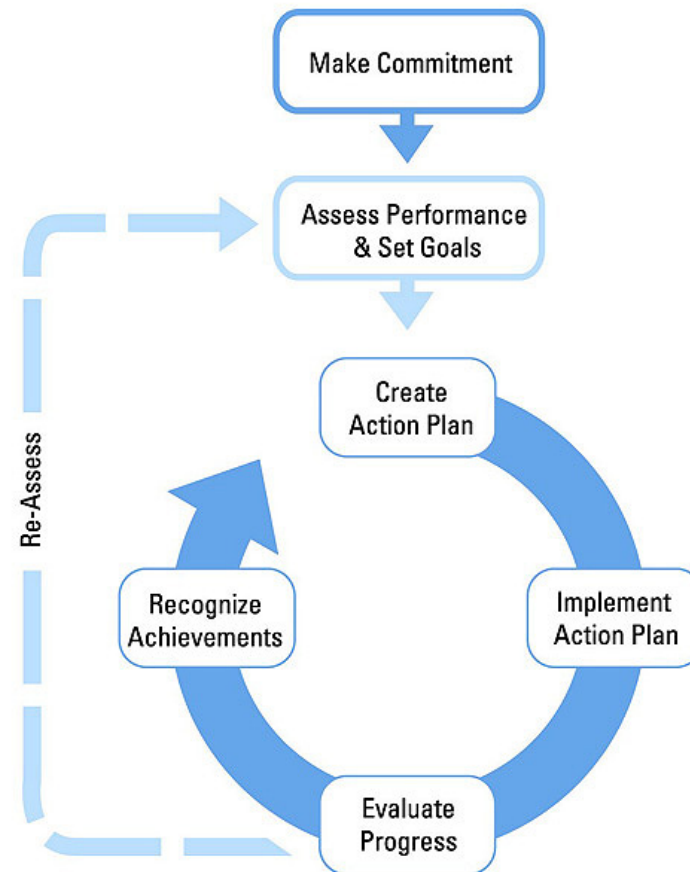
Program Update & Discussion

Web Conference
January 18, 2006

About The Web Conferences



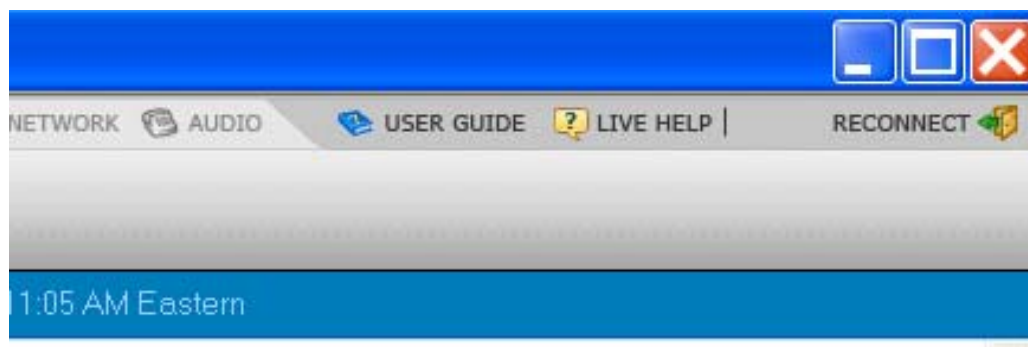
- **Monthly**
- **Topics are structured on a strategic approach to energy management**
- **Help you continually improve energy performance**
- **Opportunity to share ideas with others**
- **Slides are a starting point for discussion**
- **Open & interactive**



Web Conference Tips



- Mute phone when listening! Improves sound quality for everyone.
Use * 6 – to mute and # 6 to un-mute
- If slides are not advancing, hit the **reconnect** button or close presentation window and press the launch button again.



Web Conference Tips



- Presentation slides will be sent by email to all participants following the web conference.
- Hold & Music – If your phone system has music-on-hold, please don't put the web conference on hold!



Today's Web Conference



- Welcome
- Jean Lupinacci – Overview of Achievements & Commercial Sector Updates
- Betsy Dutrow – Industrial Sector
- Questions & Discussion
- Announcements

Importance of energy efficiency



- Hurricane season triggers mini energy crisis
- Energy Costs continue to increase – Americans now spend over \$700 billion on energy
- Energy demand expected to climb 40% by 2025
- 85% of US Carbon Emissions stem from electricity generation and use.
- GHG emissions expected to climb as much as 60% by 2025
- 50% of projected national energy use and CO₂ emissions within the next 10 years will be from use of equipment

ENERGY STAR Program Results



With help of ENERGY STAR, in 2004 American consumers and businesses:

Prevented over 30.3 million metric tons of greenhouse gas emissions (MMTCE)

Saved 125.8 billion kWh and 20,000 MW peak power

Prevented the equivalent GHG emissions of 20 million cars

- Saved \$10 billion estimated in energy bills
- Over 56% of Americans recognize ENERGY STAR

2004 C&I Results



Commercial, Institutional, & Industrial Partners:

- Prevented over 17.8 million tons of greenhouse gas emissions (MMTCE),
- Saved over 67.8 million MWh, *estimated*
- Include almost 1,500 commercial/public/industrial organizations

Selected Highlights from 2004



Strategic Collaborations Deliver Action

- **25 States and DC** – join the ENERGY STAR Challenge
- **Real Estate Roundtable** issued letter to President Bush calling attention to how the real estate industry, through ENERGY STAR, has addressed energy management challenges
- **CEO of California Portland Cement Company and Chairman of Portland Cement Association** urges the cement industry to embrace energy efficiency and recommends ENERGY STAR to fellow cement industry CEOs
- **NAREIT** partnered with ENERGY STAR to design “Leaders in the Light” to recognize excellence in energy efficiency among its members
- **Healthcare Property Investors**, largest Healthcare REIT, and **Lillibridge**, 4th largest REIT, joined ENERGY STAR and began benchmarking
- **California Energy Commission (CEC)** shapes their benchmarking recommendations on ENERGY STAR
- **AEE** integrated ENERGY STAR into CEM curriculum
- **BOMA BEEP** launched to offer web based benchmarking training through EPA. First training signed up 300 within 48 hours of posting.
- **Target Finder** well documented in USGBC LEED-NC advance training course.
- **Food Lion** qualified for its 400th label, representing the single largest number of labels for one partner.
- New energy efficiency guide produced for the **National Automobile Dealers Association** who will print/distribute 20,000 copies to members.

Tools & Resources Expanded In 2005



- **Automobile Assembly EPI** - First industrial plant energy performance benchmarking tool released.
- **ENERGY STAR Exchange Services (ESES)** launched to provide automated benchmarking services; benchmarking activity expected to increase further as a result
- **Individual facility performance** can now be tracked over time in Portfolio Manager as each facility in a portfolio now has the ability to establish a baseline
- About **1,000 individuals trained** on Target Finder in 2005
- **Financial Value Calculator** updated
- **“Building Partner In Practice”** and **“Leaders’ Stories”** database created with stories published on the web.
- **Off the Charts** – Newsletters on energy management for the financial sector published and distributed.
- **Over 300 people from 160 ENERGY STAR partner organizations** – participated on web conferences.
- **Teaming Up To Energy** – guidebook on creating an energy team developed.

Key Themes for 2006



- Broaden and increase relevance of ENERGY STAR to C&I market
- Refine and validate energy performance ratings
- Enhance communications resources and efforts.
- Educate businesses about the importance of energy as a necessary step in green buildings
- Expand coordination with states, utilities and service and product providers to promote energy savings through ENERGY STAR



Commercial & Institutional Sectors News

Strong Growth in Market Adoption



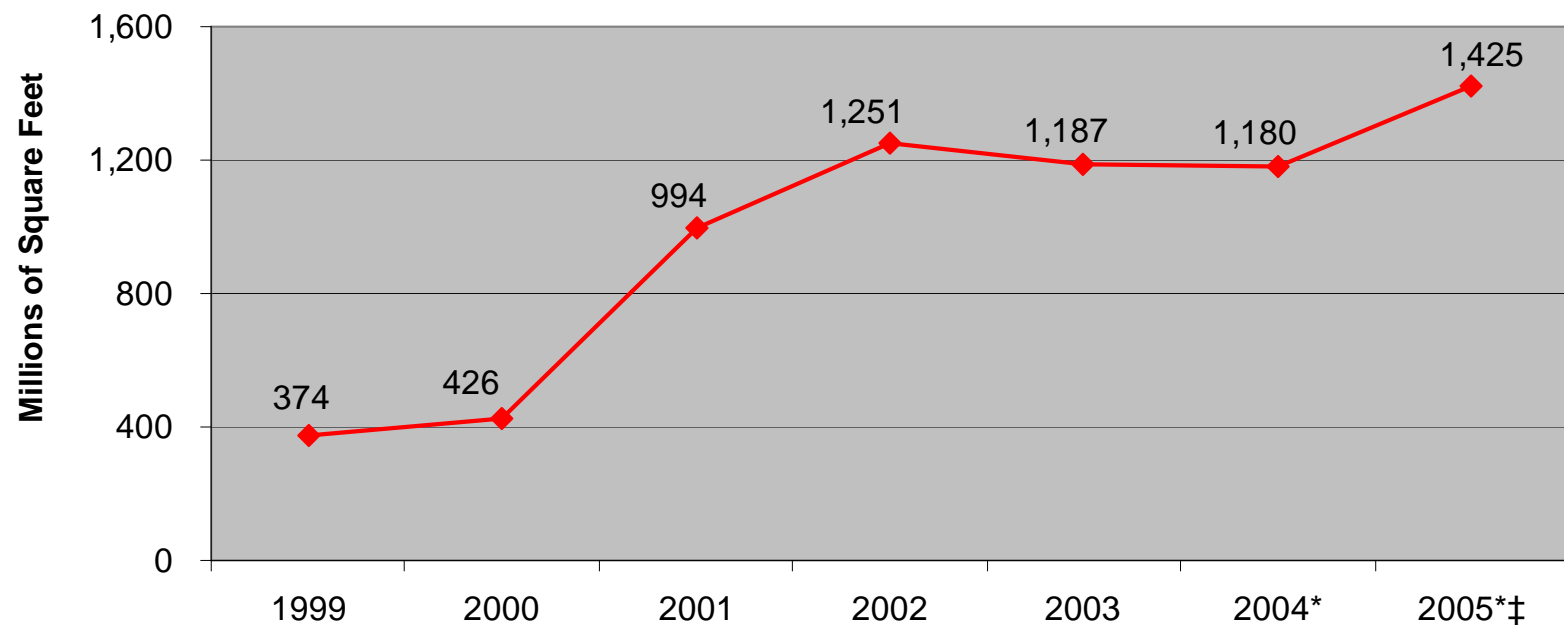
- Over 24,500 buildings rated
 - Offices 8,950
 - Schools 9,500
 - Supermarkets 2,665
 - Hospitals 1,108
 - Hotels 1,602
 - Financial Centers 118
 - Warehouses 119
 - Residence Halls 213
- Strong re-benchmarking
- Over 2,500 labels – over 460 million sq/ft

Square Footage of Buildings With Energy Ratings on an Annual Basis



Trends:

- Almost 4 billion cumulative square feet projected to be benchmarked through 2005



*New energy rules/algorithms were introduced in 2004, and apply to the data for 2004 and subsequent years. All other years reflect data under the old energy rules/algorithms.

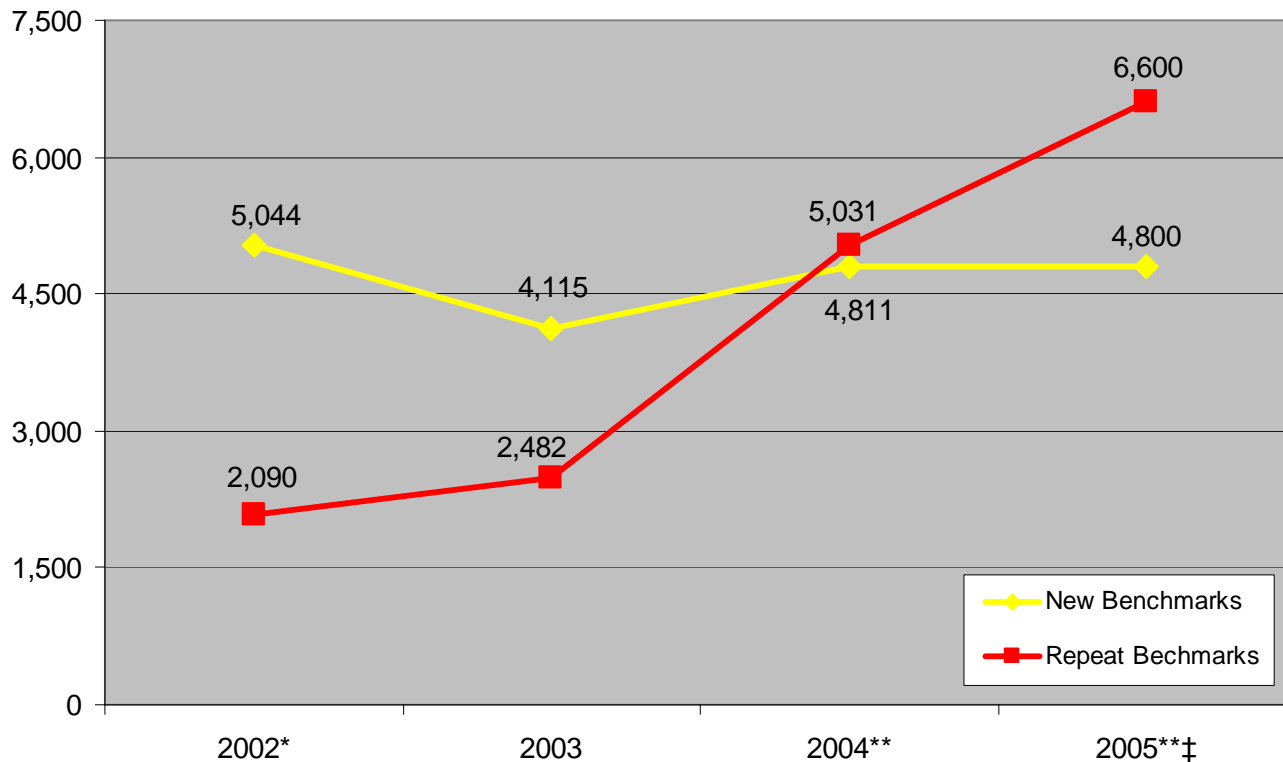
‡ Projected for 2005.

Repeat Benchmarking Continues to Grow



Trends:

- Repeat benchmarking activity has tripled since 2002
- Project about 6,600 repeat benchmarked buildings in 2005



* First year benchmarking data broken out by new/repeat buildings.

** New energy rules were introduced in 2004, and apply to the data for 2004 and subsequent years. All other years reflect data under old energy rules/algorithms.

‡ Projected for 2005.

Where is benchmarking occurring?



Category	% of Space Type	% of Floor Space
Office	37%	53%
Schools	39%	19%
Supermarkets	12%	3 %
Hotels	6%	8%
Hospitals	5%	13%
All other	1%	4 %

Who earning the ENERGY STAR?



- Percent of ENERGY STAR labels by space type
- Office buildings – 39%
- Supermarkets – 32%
- Schools – 19%
- Hotels – 6%
- Hospitals – 2%
- Courthouse – 1%
- Bank Branches - <1%
- Financial Centers - <1%



ENERGY STAR Leaders/ Challenge Participants



- **55 partners** have opened **Leaders'** Accounts as of December 22, 2005. Of the 55, 20 organizations have achieved the following incremental energy efficiency improvements across their entire building portfolio:

Recognition	Partner	
10 Point Improvement	Colorado Springs School District 11	South Colonie Central Schools
	Independent School District 197	South Washington County Schools District 833
	New York Presbyterian Hospital	The Vanguard Group
	Rochester City School District	York County School Division
20 Point Improvement	Cambridge Savings Bank	
30 Point Improvement	Gresham-Barlow School District	
75 Rating Achievement Recognition	Buehler Food Markets	Granite Properties
	Cambridge Savings Bank	Gresham-Barlow School District
	Columbus Hospitality	HE Butt Grocery Company
	Douglas, Emmett & Company	San Diego Unified School District
	Food Lion	Saunders Hotel Group
	Giant Eagle Inc.	USAA Real Estate Company

ENERGY STAR Leaders/ Challenge Participants cont.



- In March 2005, EPA launched the **ENERGY STAR Challenge—Build a Better World 10% at a Time**. Currently, there are **47 ENERGY STAR Challenge participants**. They include:

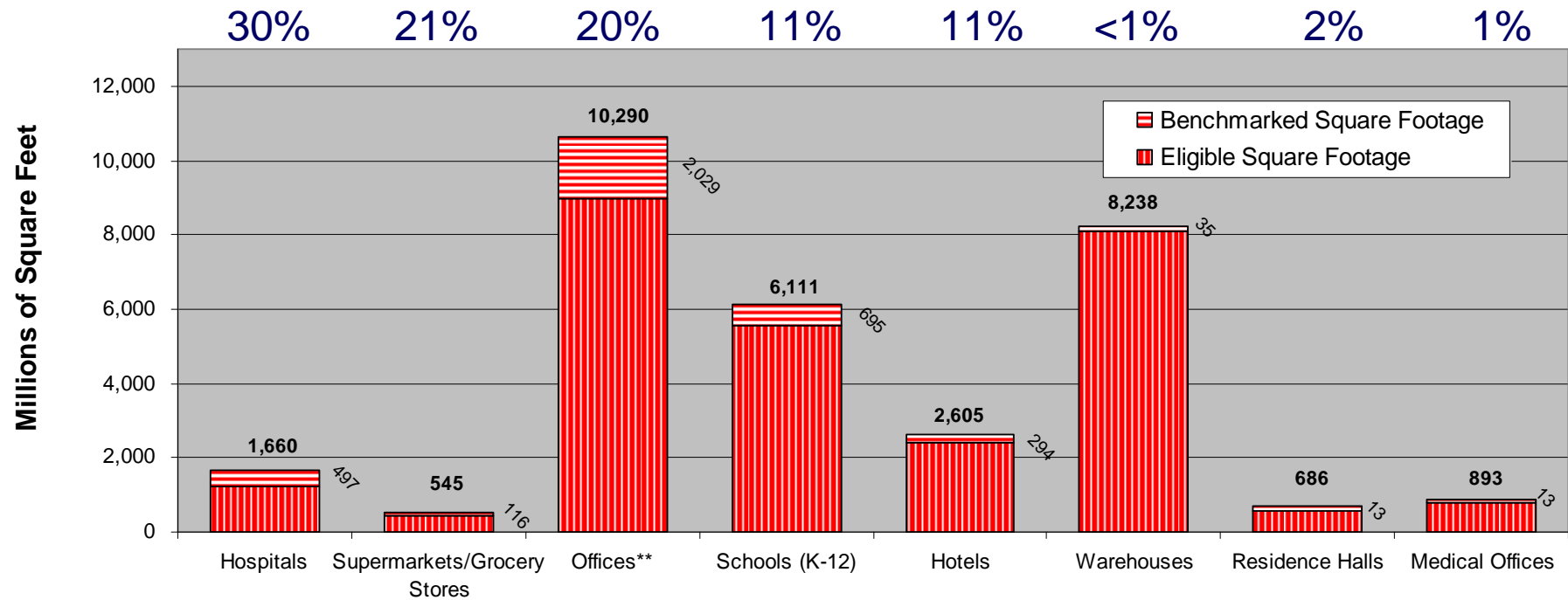
Alliance to Save Energy (ASE)*	Illinois*	National Parent Teacher Association (PTA)*
American Hotel & Lodging Association (AH&LA)	Indiana*	The National School Boards Association (NSBA)*
American Society for Healthcare Engineering of the American Hospital Association (ASHE)	Institute for Sustainable Energy	New Hampshire
The American Solar Energy Society (ASES) - Legacy Schools Program*	Kansas*	New Mexico*
Arizona*	Kentucky*	New York State Energy Research and Development Authority (NYSERDA)
Association of Energy Engineers*	Maine	North Carolina*
Association of School Business Officials International (ASBO)	Maryland*	North East Sustainable Association*
Building Owners and Managers Association (BOMA)	Michigan*	Ohio
California State Teachers' Retirement System (CalSTRS)	Minnesota*	Pennsylvania
Council of Educational Facility Planners International (CEFPI)	National Association of Counties (NACo)	Public Technology Institute
Council of Great City Schools (CGCS)*	National Association of Elementary School Principals (NAESP)*	Real Estate Roundtable
Delaware	National Association of Energy Service Companies (NAESCO)	SACIA—The Business Council of Fairfield County, Connecticut
Efficiency Vermont	National Association of Secondary School Principals (NASSP)*	US Telecomm Association (USTA)
Florida*	National Association of State Energy Officials (NASEO)	Washington, DC*
Food Marketing Institute (FMI)	National Energy Education Development Project (NEED)*	Wisconsin*
Hawaii*	National Energy Foundation (NEF)*	

* These partners have joined the Challenge since March.

Future Opportunities



Square Footage Eligible Vs. Benchmarked By Space Type*



* Reflects the new energy rules/algorithms introduced in 2004.

** Includes general offices, bank branches, courthouses, and financial centers.

Making Benchmarking Easier



Automated Benchmarking

- Allows 3rd party energy service providers and individual organizations to send data to EPA and automatically get ratings back
- Requires relatively high level of technical sophistication
- 5 Service providers in the pilot successfully tested system
- Applicable for large organizations and/or those using data providers to track energy
- Over 2,700 buildings received energy ratings on a monthly basis without any manual data entry.

Who Offers This Service



ENERGY STAR Exchange Service partners:

- **Avista Advantage** - 86,645 ratings during testing
 - **Cadence Network** - 4,477 ratings during testing
 - **Ei3** - 2,206 ratings during testing
 - **Energard** – 1,154 ratings during testing
 - **Save More Resources** - 537 ratings during testing
-
- **For Portfolio Manager users:**
 - Account data can be transferred and consolidated with these providers

Upcoming in Portfolio Manager: 2006



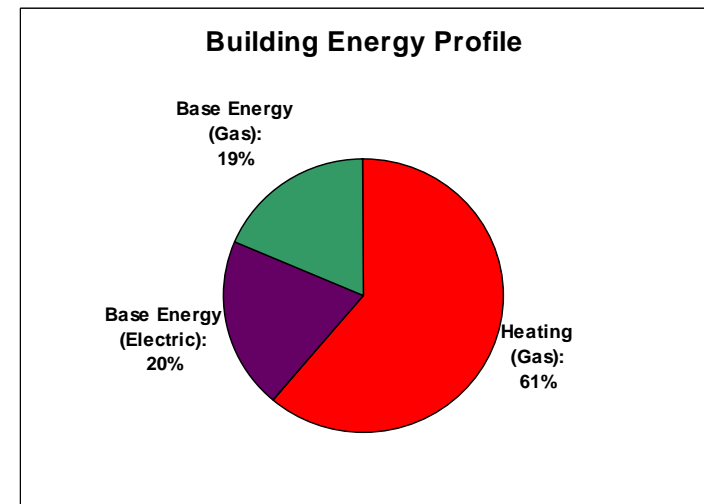
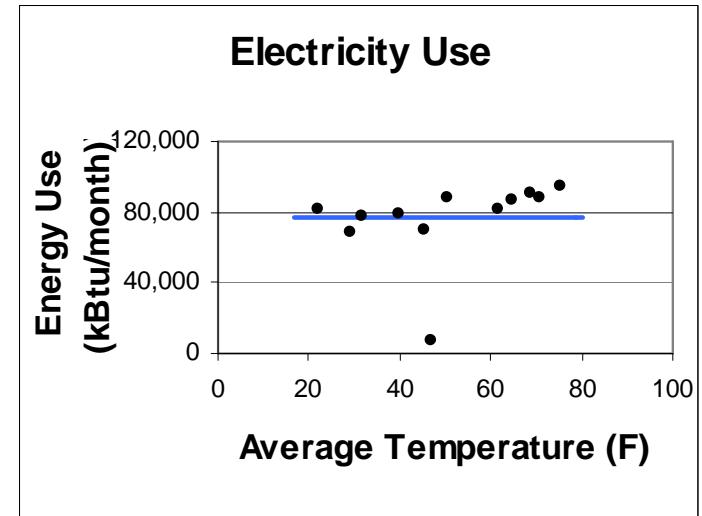
Existing energy performance ratings:

- To stay as current as possible
 - Latest building energy survey data from DOE
 - Building uses and operation change over time
- To ensure continued credibility
 - Greater transparency
 - Potentially more robust approaches
 - Simplify and improve approach weather normalization to address outliers
- Respond to valid comments from users and other stakeholders
- Form Stakeholder groups to help with modifications

Plan Portfolio Manager Improvements



- Portfolio-wide or group averaging
- Tracking change over time - coming in February
- Sharing data for multiple facilities at a time – coming in February
- Graphing capability
- Building Energy Profile feature
- Water tracking capability



Technical Guidance



- Update Building Upgrade Manual
 - Revised with up to date technical and management guidance
- Retro commissioning guidance
 - In conjunction with Portland Energy Conservation Inc (PECI), New York State Energy Research and Development Authority (NYSERDA) and others
- Benchmarking guidance
- Spring and Fall technical guidance to save energy



Industrial Sector News

Industrial partner achievements



2004 Emissions Prevented	2005 Emissions Prevented
4.1 MMTCE*	4.2 MMTCE**

**million metric tons of carbon equivalents*

***based on preliminary data*

Industrial Focuses



Focuses provide:

- An energy forum within an industry
- Plant energy performance indicators, EPIs
- Energy guides
- Consideration of barriers to energy efficiency and a plan of address

Focus Industries



Industry	EPI	Energy Guide	Annual Meeting
Vehicle Assembly	Yes	Yes	Yes – 4 th
Corn Refining	Yes	Yes	Yes – 4 th
Cement	Yes	Yes	Yes – 2 nd
Pharmaceutical	Draft	Yes	Yes – 2 nd
Petroleum	Solomon	Yes	Yes – 1 st
Glass	Developing (3)	Draft	9/06
Food Processing	Developing (2)	Developing	10/06
Petrochemicals	Initiating 2006	Initiating 2006	2007
Pulp & Paper	Initiating 2006	Initiating 2006	2007

New for 2006



- Plant labeling for industries with completed EPIs
 - First offer for auto assembly plants, followed by cement and corn refineries
 - Process similar to buildings
 - 75 or better score, Statement of Energy performance, PE certification
 - Banner/flag and certificate

New for industrial partners and industrial focuses in 2006



- World Energy Engineering Congress, Washington, DC, September 12 – 15, 2006
 - Most focus industries will meet early the week of September 12th for their annual meeting
 - Corn refining, cement, motor vehicles, glass, pharmaceuticals
 - WEEC opens September 13th
 - ENERGY STAR session, September 13th, presentations by industrial participants
 - Reduced attendance rate
 - www.energycongress.com/ENERGYSTAR
 - Greater opportunity for networking among variety of industries

New Resources For 2006



- Plant Energy Program Assessment Matrix
- Guidance on developing energy performance benchmarks
- Expanded “In Practice” stories within the Guidelines and in a database format
- New web-based information on role of energy programs in climate risk management

Teaming Up To Save Energy



40 page guidebook with checklist for developing a energy management team.

Based on the experience and practices of leading ENERGY STAR partners.

Real company examples provided

Electronic copy available now, printed copies available in February / March





Questions & Comments



Thank you for participating!