# ENERGY STAR – Leading the Way to Climate-Friendly Buildings

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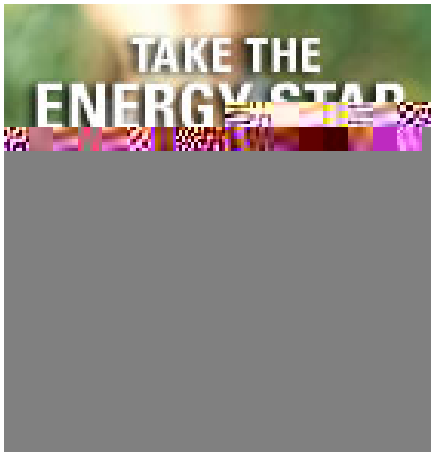
# U.S. Mayors Climate Protection Agreement

- "We will strive to meet or exceed Kyoto Protocol targets for reducing global warming pollution by taking actions in our own operations and communities . . ."
- Mayor Abramson and others have committed to, at a minimum, reduce greenhouse gas (GHG) emissions by 7 percent below 1990 levels by 2012.

# ENERGY STAR Challenge




Improve energy efficiency 10% or more**!**

# Also ENERGY STAR

AEGON Center
Louisville, KY

Shriner's Hospital for Children
Houston, TX

500 Boylston St.
Boston, MA

Westin San Francisco Airport
Millbrae, CA

Twin Peaks Charter Academy
Longmont, CO

Blue Earth County Courthouse
Mankato, MN

# What is ENERGY STAR for Buildings?

- U.S. Environmental Protection Agency energy management program providing proven solutions to help public and private sector building owners and managers reduce their energy consumption..
- Provides proven solutions to help public and private sector building owners and managers reduce their energy consumption.
- Works in markets with a focus on:
  - Commercial property (offices, retail, hotels)
  - Public sector (government, K-12, higher ed)
  - Healthcare
  - Small business and congregations

# What is ENERGY STAR for Buildings?

- Recognition
  - ENERGY STAR Partner
  - Designed to Earn the ENERGY STAR
  - ENERGY STAR Label
  - ENERGY STAR Leader
  - ENERGY STAR Partner of the Year

# What is ENERGY STAR for Buildings?

- Over 1,700 Partners operating more than 11 billion square feet of space (nearly 20% of space in the U.S.).
- Over 70,000 buildings measure and track their energy performance, energy costs, and carbon emissions with ENERGY STAR.

# The ENERGY STAR for Buildings

- ENERGY STAR labeled buildings use 35 percent less energy than average buildings.
- Nearly 4,000 buildings have earned the ENERGY STAR label for energy efficiency.

# Who's Improving Energy Performance with ENERGY STAR

- **State and Local Governments** (California, Ohio, Louisville, Washington, DC, Albuquerque)
- **Major corporations** (Humana, GE, JC Penney, Marriott, Food Lion, Wal-Mart, CVS, Staples)
- **Property owners and managers** (Hines, CB Richard Ellis, Jones Lang LaSalle, USAA Realty, Transwestern)
- **K-12 Schools** (Jefferson County Public Schools, San Diego Schools)
- **Universities** (University of New Hampshire, City University of New York, University of Michigan)
- **Hospitals and health systems** (Providence Health, NY Presbyterian)

# ENERGY STAR Partner Organizations

- US Conference of Mayors
- National Association of Counties (NACo)
- Building Owners and Managers Association (BOMA)
- International Facility Management Association (IFMA)
- CoStar (Commercial Building Multiple Listing Service)
- American Society of Healthcare Engineers (ASHE)
- National Automobile Dealers Association (NADA)
- International Community Bankers Association (ICBA)
- National Association of Evangelicals (NAE)
- National Small Business Association (NSBA)
- American Bar Association (ABA)

. . . and many more.

# ENERGY STAR Participation in Louisville

- Labeled Buildings - 19 in Kentucky; 3 in Louisville
  - AEGON Center (1999, 2003, 2006, 2007)
  - Courtyard Louisville Airport (2007)
  - Isaac Shelby Elementary School (2006)
- Partners – 19 Buildings Partners in KY
  - 6 K-12 School Districts
  - 4 Industrial
  - 3 Local Government
  - 3 Higher Education

# Financial Benefits of ENERGY STAR

- Leading companies realize that energy efficiency can have a high return-on-investment and is necessary in order to remain competitive.
- Businesses and organizations that are leaders in energy efficiency use about 30 percent less energy than their competitors.
- Financial benefits of energy efficiency include:
  - Operating costs for ENERGY STAR buildings are more than 50 cents per square foot less than for average buildings. This means savings of $5,000 per year for every 10,000 square feet of typical office space.
  - Corporate real estate owners can lower operating costs by $25,000 per year for every 50,000 square feet of typical office space.
  - Full-service hotels that improve energy efficiency by 10 percent see an increased average daily rate of $1.35.
  - Every $1 saved on energy at a nonprofit hospital is equivalent to generating $20 in new revenue.
  - A 10 percent reduction in energy costs for the average full-line discount retailer can boost net profit margins by as much as 1.55 percent.

# Environmental Benefits of ENERGY STAR

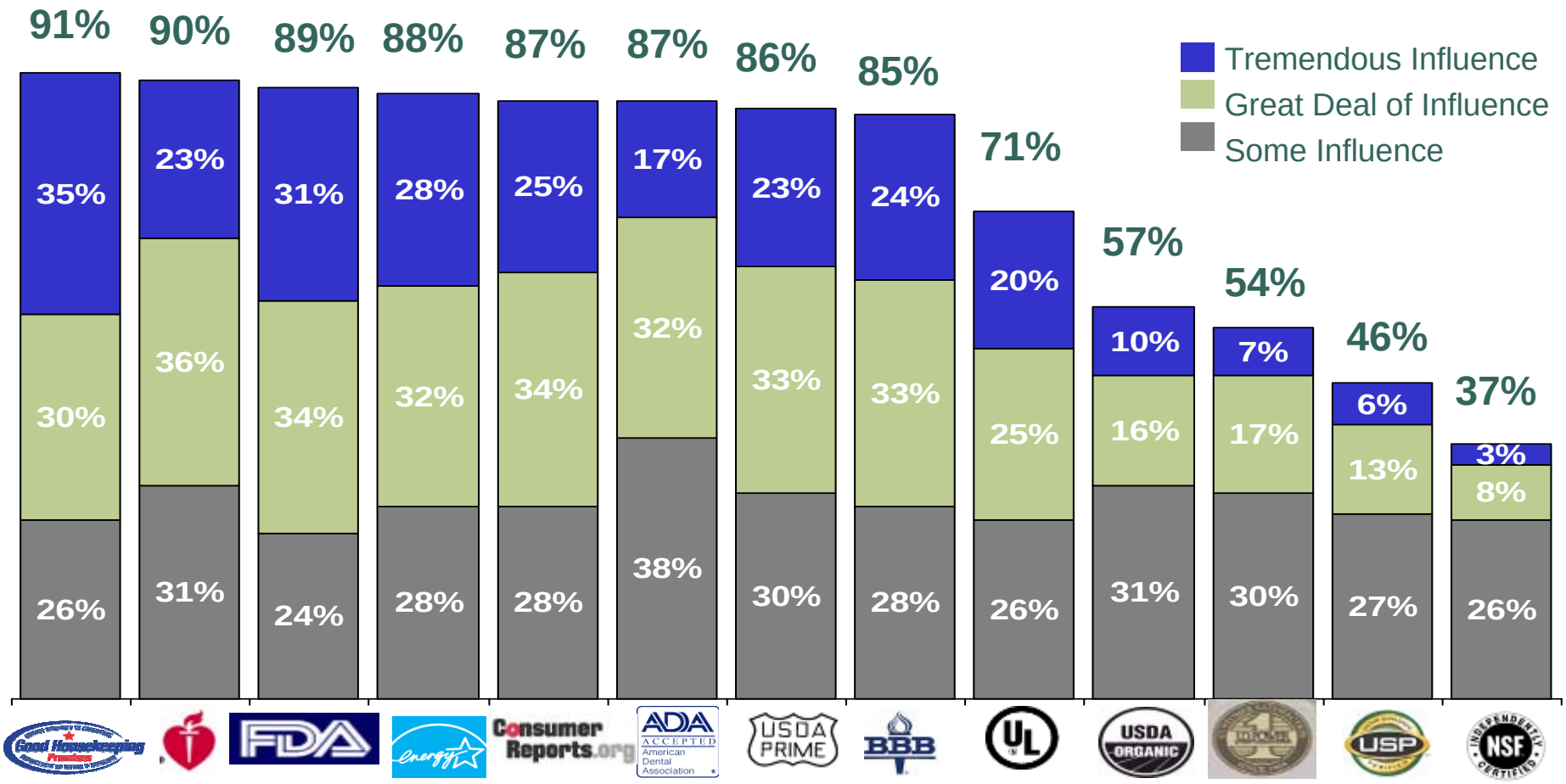
- If the energy efficiency of commercial and industrial buildings improved by just 10 percent, Americans would save about $20 billion and reduce greenhouse gas emissions equal to the emissions from about 30 million vehicles.
- Commercial buildings and industrial facilities generate nearly 50% of U.S. carbon dioxide emissions.
- 30% of energy consumed in commercial buildings is used unnecessarily or inefficiently.
- According to the U.S. Green Building Council, GHG emissions from commercial buildings are projected to grow faster than any other sector over the next 25 years – about 1.8 percent per year.
- **IMMEDIATE, LOW-COST** emission reduction opportunities – EXISTING buildings.

# Public Relations Benefits of ENERGY STAR

- Americans' concerns about environmental issues have increased more than 10 percentage points between 2004 and 2006 (Gallup survey).
  - 88% of US adults responded that "energy efficient" was very important in their electronics, appliance, lighting, and heating/cooling equipment purchases
- 58% of Americans rank "dealing with the nation's energy problem" as a top priority in 2006, up from 40% in 2003 (Pew survey).
- 79% of Americans think global warming poses a serious threat to future generations (ABC News/Washington Post poll)
- ENERGY STAR is a trusted, proven and recognized brand
  - Aided recognition levels for ENERGY STAR are over 68%, according to latest survey results
- More than 60% of U.S. households reported being favorably influenced by the ENERGY STAR label
- According to 2003 study
  - 85% of 25-34 year-olds & 76% of 35-44 year-olds
  - 74% of those with HHI $50,000+
  - 76% families with kids

….recognize the ENERGY STAR brand

# ENERGY STAR – A Trusted Brand



# Is Your Building Performing Well?

**Fuel Efficiency**

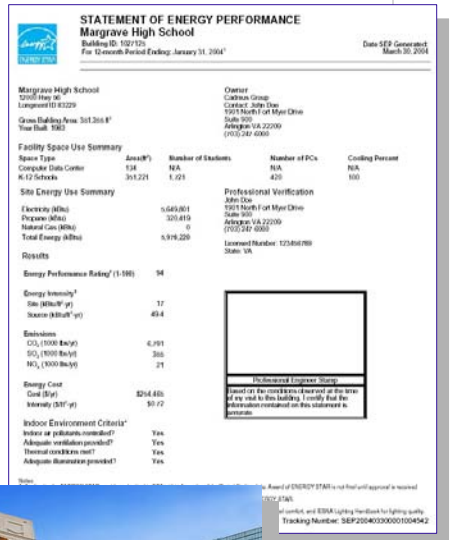
***MPG***

**Is 18 MPG high or low for an automobile?**

**Is 80 kBtu/SF/YR high or low for a building?**

**Energy Performance**

***EPA Benchmarking***

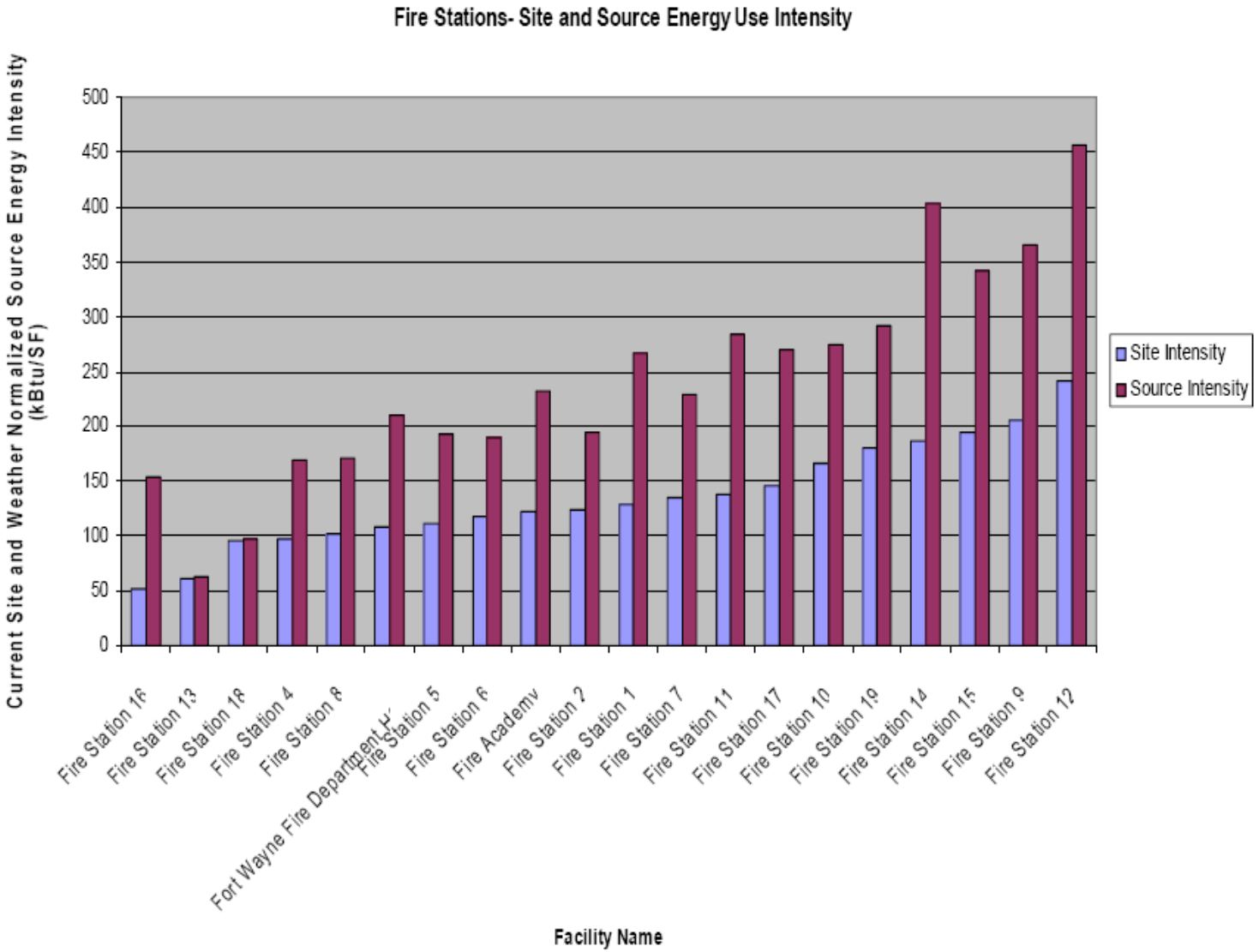

STATEMENT OF ENERGY PERFORMANCE
Margrave High School

ENERGY STAR

# Benchmarking – The First Step to Energy Savings in Buildings

- Benchmarking through ENERGY STAR allows you to:
  - Compare one building against a national sample of similar buildings.
  - Compare all of your buildings of a similar type to each other.
  - Set priorities for use of limited staff time and/or investment capital.
- Why bother?

# Fort Wayne Fire Stations
# 20 Similar Buildings – Different Energy Use



# Portfolio Manager – Helping You Track Your Performance

- Free online tool where you can:
  - Benchmark the energy use of all of your buildings – all will receive an EUI (energy use intensity) and some will receive ratings on a 1-100 scale.
  - Track changes in energy use over time in single buildings, groups of buildings, or entire portfolios.
  - Track cost savings and $CO_2$ emissions.
  - Apply for ENERGY STAR recognition.
  - Track water usage.
- Free on-line live trainings offered monthly.
- http://www.energystar.gov/benchmark
- Louisville-Jefferson County Metro government currently initiating benchmarking of all city buildings with Portfolio Manager.

# ENERGY STAR Buildings – Beyond Benchmarking

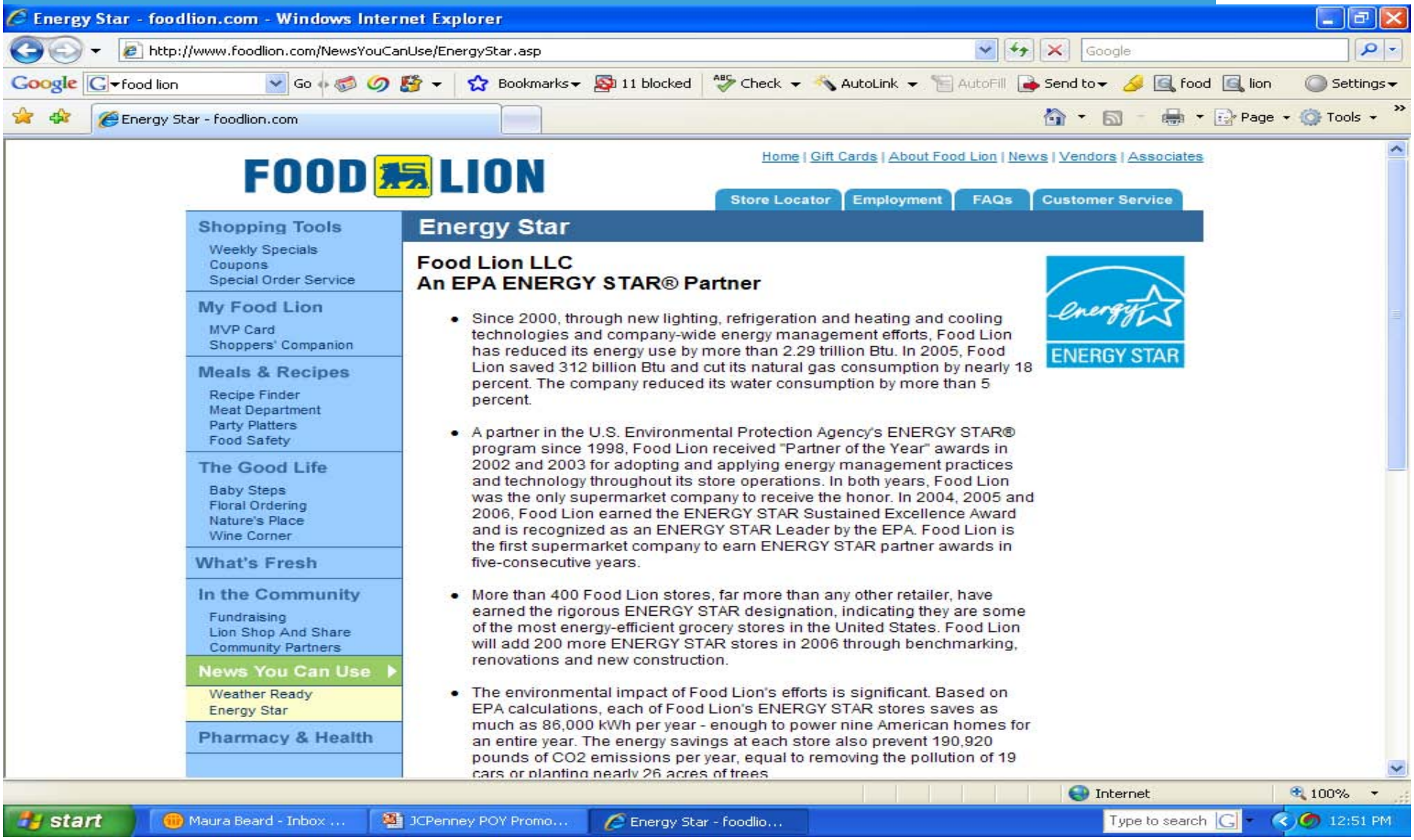
- Technical Tools and Guidance
  - Energy Management Guidelines
  - Creating an Energy Management Team
  - Building Upgrade Manual
  - Calculator tools to track return on investment of projects
  - Assistance for architects in designing energy efficient buildings
- On-Line Training
  - Designing Top Energy Performing Buildings
  - Portfolio Manager and Target Finder
  - Best Practices and Networking Meetings
  - ENERGY STAR Challenge:  Getting Started
- Campaigns to Involve Employees, Customers, and Others
  - ENERGY STAR Challenge
  - Change-a-Light Campaign

# ENERGY STAR and Home Depot

The Home Depot website:

- Features the 2007 Partner of the Year Logo
- Links to ENERGY STAR educational materials and campaigns
- Provides information on energy efficient products for sale

# ENERGY STAR and Food Lion



# ENERGY STAR and McDonalds/ Dollar General

Shopping Bags
(Dollar General)

Cups and Bags
(McDonalds)

# ENERGY STAR and Starbucks

## Starbucks Earth Day Campaign

# ENERGY STAR and Sears

# ENERGY STAR and Giant Eagle

Giant Eagle held an ENERGY STAR in-store awareness event

- Employees wore “Ask about ENERGY STAR” pins
- Distributed 3000 flyers in grocery bags
- Displayed posters in all stores
- Displayed table tent cards at all stores with dine-in cafes

# ENERGY STAR Bag Stuffer for Retail Partners

## MAKE YOUR HOME MORE ENERGY EFFICIENT.

### ENERGY STAR® can help you do your part to prevent global climate change.

**Use ENERGY STAR qualified light bulbs (CFLs)**

- Use up to 66% less energy than incandescent bulbs
- Last up to 6-10x longer
- Are available in a variety of shapes and styles

**Buy ENERGY STAR qualified appliances**

- Clothes washers use 50% less energy and up to 15 gallons less water
- Dishwashers use 25% less energy
- Refrigerators and freezers use 40% less energy
- Room ACs use 10% less energy

Get a professional energy evaluation and make sure your home is properly insulated and sealed.
For more information about products and programs, go to www.energystar.gov.

# Portland Office Energy Showdown

## Recognized office buildings that have achieved a high level of energy efficiency

- Launched in early 2007 in conjunction with the BOMA Energy Efficiency Program, or BEEP
- Participants benchmarked with Portfolio Manager using energy data from April 2006 through March 2007.
- Those who placed first, second and third in the Showdown received cash prizes and all properties qualifying for the ENERGY STAR label received free engineering certification, provided by Energy Trust of Oregon.

The 200 Market building, managed by Russell Development Company, won first place

# BOMA Seattle/King County Kilowatt Crackdown

Promoting leadership in energy efficient building operations.

- Participants will benchmark their buildings in Portfolio Manager by 1/25/2008 using 2007 utility data.
- Winners receive cash prizes, and those qualifying for the ENERGY STAR label received free engineering certification.
- Prizes include a private suite party at a Seattle Mariners game, tickets to the BOMA golf tournament, and a catered lunch for 12.

# Washington DC's Co-branded Print Outreach

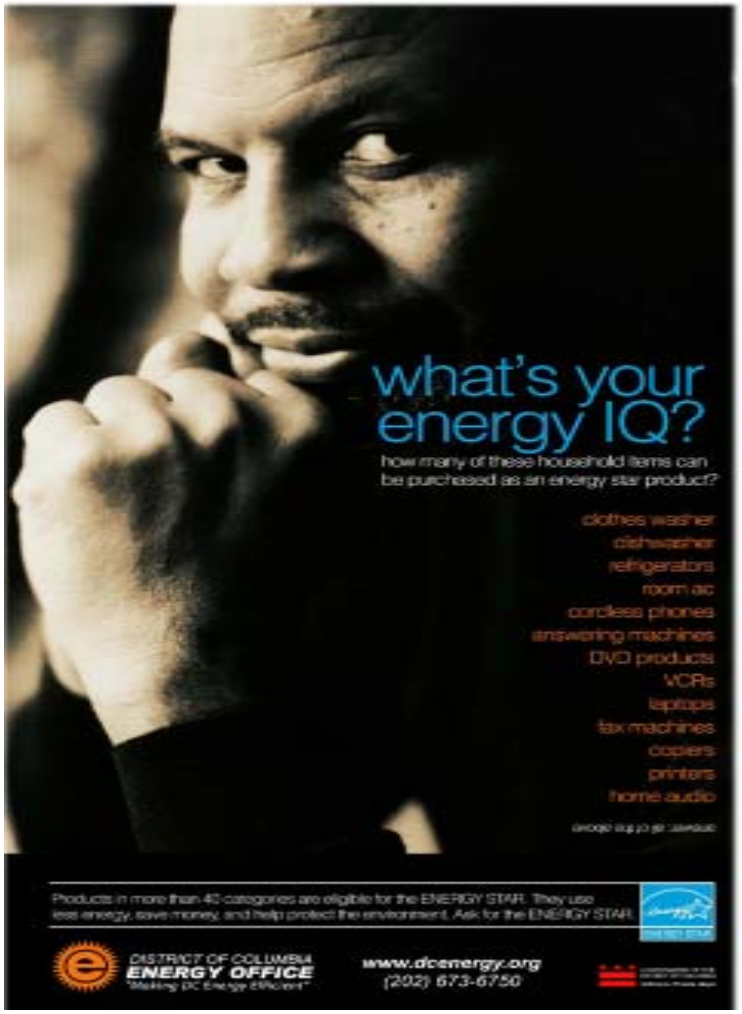
- Washington Post Express
- Examiner
- Washington City Paper
- Capital Community News
- Washington Informer
- Washington Sun
- Washington Hispanic (Spanish)
- Atref (Amharic)
- Asian Fortune (Vie, Kor, Chi)

# ENERGY STAR at the Wizards Game

ENERGY STAR Dance-Cam!

# ENERGY STAR SIGNAGE

## Cheesecake Factory Menu




## Interior Bus Posters

## Exterior Bus Poster

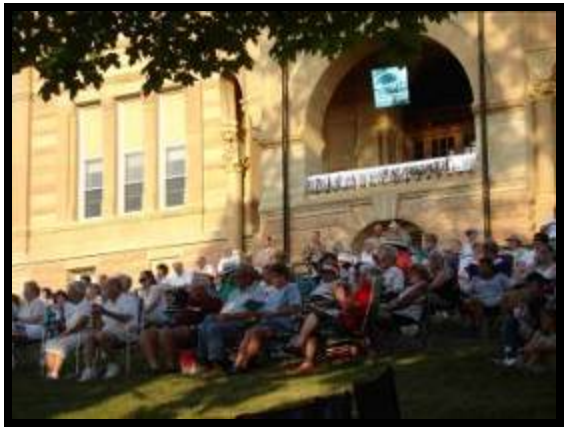
# One Potomac Yard Building in Arlington, VA

- Earned 85 and 82 EPA rating respectively
- LEED Gold certification

Arlington County Commissioner Paul Ferguson presents Benjamin Comm, Jones Lang LaSalle Managing Director, with a recognition certificate for the One Potomac Yard's ENERGY STAR label.

**Case study at [www.wbdg.org/references/cs_potomac.php](www.wbdg.org/references/cs_potomac.php)**

# Blue Earth County, MN
# Outreach to Residents



Concert on the Courthouse Lawn Celebrating the ENERGY STAR Award

Efficient Electric Display

Historic Courthouse Tours

# Louisville ENERGY STAR Challenge

- Questions to Consider
  - What are the barriers to energy efficiency in your organizations?
  - What types of encouragement from Metro Government might motivate private organizations to improve efficiency?
  - What are the most effective avenues to communicate this campaign to private organizations?
  - What types of activities, programs, or campaigns would be valuable to private organizations?
  - What would your organization hope to get out of partnering with the city on this effort?