



---

# ENERGY STAR Resources for EECBG Projects

Caterina Hatcher  
US EPA  
ENERGY STAR Buildings

# What is ENERGY STAR for Buildings?



- U.S. Environmental Protection Agency energy management program.
- Offers proven solutions to help building owners and managers reduce energy consumption.
- Program for new construction and existing buildings.
- Works in markets with a focus on:
  - Commercial property (offices, retail, hotels)
  - Public sector (government, K-12, higher ed)
  - Healthcare
  - Small business and congregations

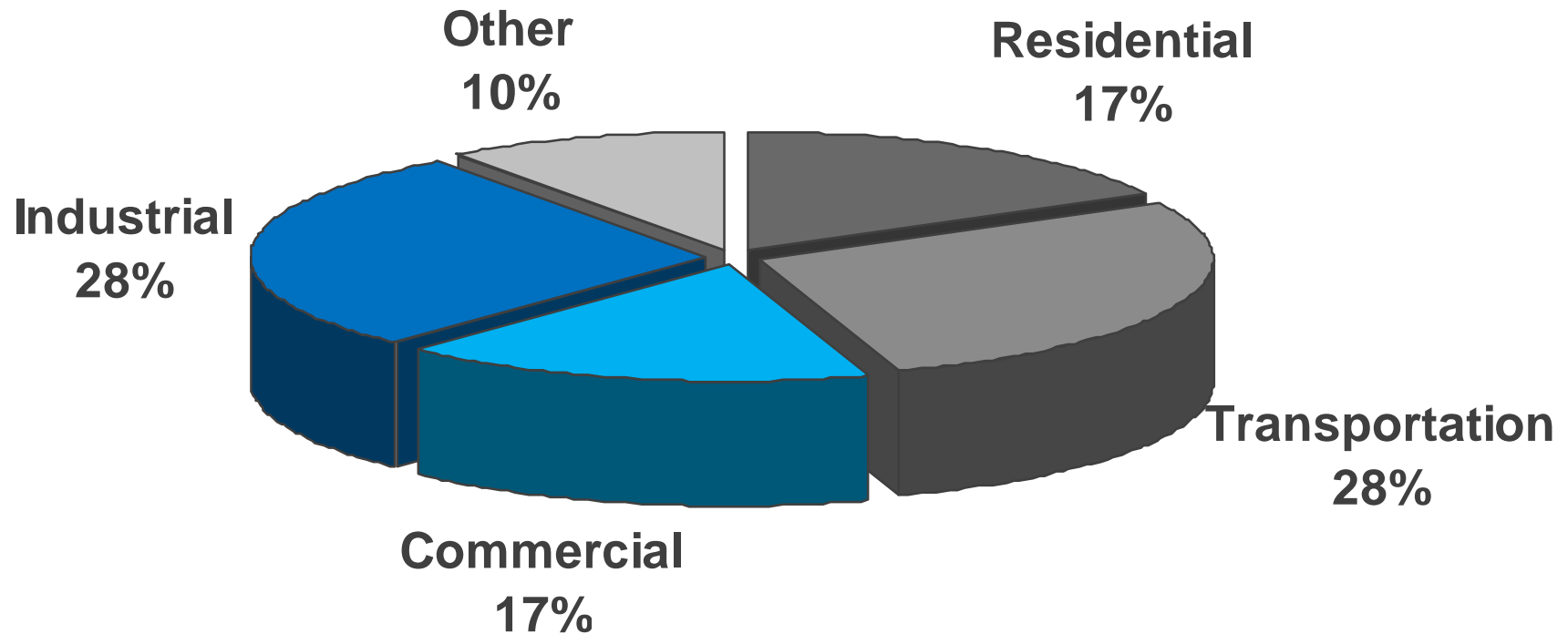
# Who's Improving Performance with ENERGY STAR



- **State and Local Governments** (California, Pennsylvania, Washington, DC, Austin, Louisville, Montgomery County (MD), Arlington County (VA))
- **K-12 Schools** (New York City Schools, San Diego Schools, nearly 100 Wisconsin school districts)
- **Commercial Real Estate** (CB Richard Ellis, Hines, Jones Lang LaSalle, USAA Realty, Transwestern)
- **Retail** (JCPenney, Kohl's, Target, Dick's Sporting Goods, Food Lion, Stop & Shop)
- **Hospitality** (Marriott, Best Western, Wyndham)
- **Healthcare** (Sunrise Assisted Living, Providence Health, Inova Health System)
- **Higher Education** (University of New Hampshire, City University of New York, University of Michigan)
- **Associations** (ICLEI, NACo, USCM, NASEO, BOMA, IFMA, American Association of Community Colleges, Green Hotels Association, National Automobile Dealers Association)



# The Big Picture: Greenhouse Gas Emissions in the United States



*Commercial buildings and industrial facilities are responsible for 45% of U.S. greenhouse gas emissions.*

*Inventory of U.S. Greenhouse Gas and Sinks: 1990-2005, US EPA*

# Leveraging ENERGY STAR in EECEBG Projects

---



- As you are launching EECEBG programs, ENERGY STAR resources can be integrated into existing programs or used to launch stand alone programs...

# ENERGY STAR Tools and Resources Library



**ENERGY STAR** CHANGE THE WORLD, TAKE THE ENERGY STAR PLEDGE. [GO](#)

U.S. ENVIRONMENTAL PROTECTION AGENCY • U.S. DEPARTMENT OF ENERGY

[About ENERGY STAR](#) • [News Room](#) • [FAQs](#) • [KIDS](#) Search  [Go](#)

<b>PRODUCTS</b> ▾ Change the world, take the ENERGY STAR Pledge.  <a href="#">Explore Products &gt;</a> Appliances Heating & Cooling Home Electronics Lighting Office Equipment Store Locator Rebate Finder	<b>HOME IMPROVEMENT</b> ▾ <b>ENERGY STAR HOME ADVISOR</b>  <a href="#">Get Customized Recommendations</a> <a href="#">Explore Home Improvement &gt;</a> Common Home Problems Home Energy Audits Air Seal & Insulate Heat & Cool Efficiently Home Performance with ENERGY STAR For Contractors	<b>HEADLINES</b>  <a href="#">ENERGY STAR Award Applications Now Available</a> <a href="#">Save on Summer Cooling Costs</a> <a href="#">EPA Announces New Set-top Box Requirements</a> <a href="#">EPA Launches New Campaign in Fight Against Climate Change</a> <a href="#">New Report: Profiles in Leadership, Recognizing ENERGY STAR Winners</a> <a href="#">More Headlines &gt;</a>
<b>BUILDINGS &amp; PLANTS</b> ▾ <a href="#">Take the ENERGY STAR CHALLENGE!</a>  <a href="#">Explore Buildings &amp; Plants &gt;</a> <a href="#">Guidelines for Energy Management</a> <a href="#">Tools &amp; Resources Library</a> <a href="#">Expert Help</a> <a href="#">Commercial Building Design</a> <a href="#">Green Buildings</a>	<b>NEW HOMES</b> ▾ <b>ENERGY STAR Qualified Homes</b>  <a href="#">Take A Tour Behind the Walls</a> <a href="#">Explore Qualified New Homes &gt;</a> Find an ENERGY STAR Builder ENERGY STAR New Home Features Benefits for Homeowners For Residential Professionals	<b>GO TO PARTNER RESOURCES</b> ▾  <b>Login</b> Username: <input type="text"/> Password: <input type="password"/>



[www.energystar.gov](http://www.energystar.gov)

# Off-the-Shelf ENERGY STAR Resources

---



- Portfolio Manager
- Building Upgrade Manual
- “Bring Your Green to Work” Campaign
- ENERGY STAR College Course
- ENERGY STAR Training

# ENERGY STAR Portfolio Manager

---



EPA's no-cost online tool: [www.energystar.gov/benchmark](http://www.energystar.gov/benchmark)

- Assess the whole building energy use of existing buildings (weather normalized EUI)
- Track changes in energy and water use over time in single buildings, groups of buildings, or entire portfolios
- Receive an energy performance rating (1-100 score), buildings that score a 75 or higher are eligible for the ENERGY STAR.
- Track CO<sub>2</sub> reductions and cost savings
- Track onsite renewable wind and solar energy use
- Custom reporting and graphing features - for your own buildings *and* external sharing



# Why Promote Benchmarking?



## Help Businesses Make More Informed Decisions:

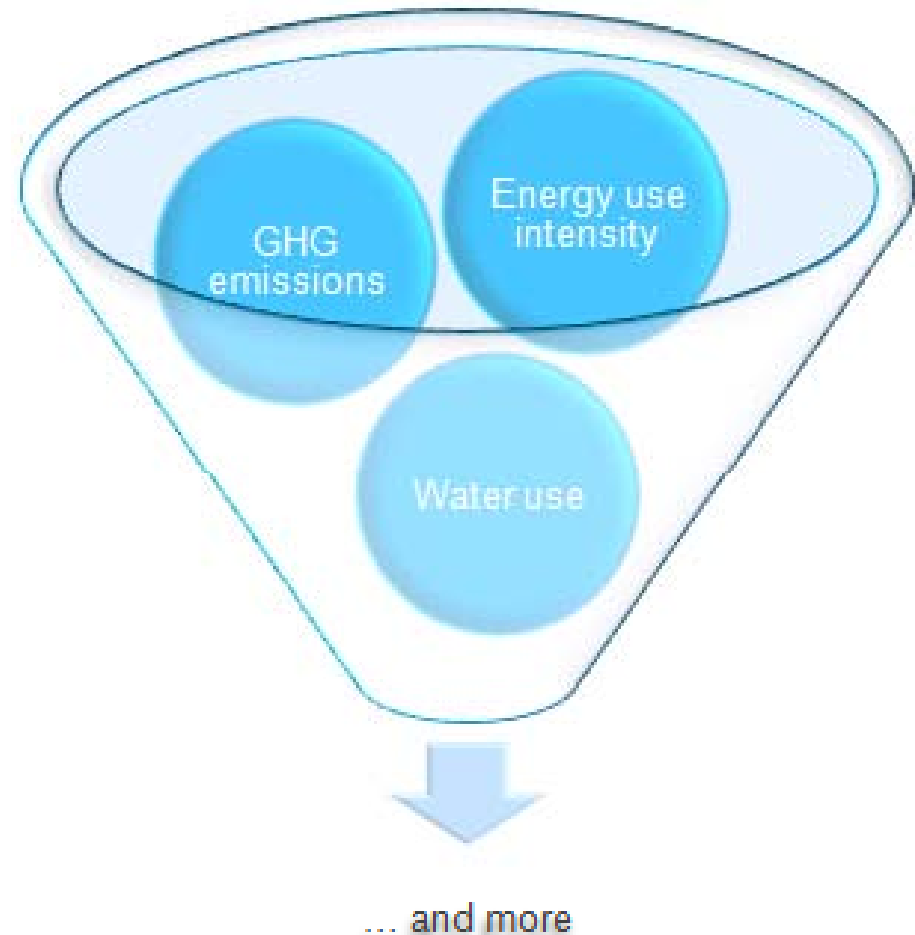
- Verify and track progress of projects
- Identify under-performing facilities
- Assess effectiveness of current operations, policies and practices
- Assist in the budgeting process
- Assist in planning: set goals, targets, and timelines
- Set investment priorities
- Be more responsive to on-going issues
- Identify billing errors



# Valuable Performance Tracking for ALL Commercial Buildings



- Such as:
  - Police Stations
  - Fire Stations
  - Assisted Living Facilities
  - Convention Centers
  - Laboratories
  - Libraries
  - Malls
  - Movie Theatres
  - Restaurants
  - Stadiums and Arenas



# Space Types Eligible for the 1-100 Performance Rating System



**Bank/Financial Institutions**



**Courthouses**



**Dormitories**



**Hospitals**



**Hotels**



**Houses of Worship**



**K-12 Schools**



**Medical Offices**



**Office Buildings**



**Retail Stores**



**Supermarkets**



**Warehouses**



**Wastewater Treatment Plants**



# Community Campaign Model: Louisville Kilowatt Crackdown



- An energy management contest open to ALL Louisville commercial buildings (including commercial real estate, health care, K-12, hospitality, etc.)
- Awards based on Portfolio Manager benchmarking results  
Greatest Improvement in Efficiency
  - Most Improved Over Time
  - Most Efficient
    - For properties with the highest overall efficiency ratings
  - The Kilowatt Cup
    - Jury awarded trophy recognizing superior achievements in energy management



More at:

<http://www.louisvilleenergyalliance.org/kilowatt10singlepage.pdf>



# Additional Campaign Models



- [Chicago Green Office Challenge](#)
- [San Francisco Earth Hour 24x7 Energy Challenge](#)
- [Portland Office Energy Showdown](#)
- [Seattle/King County Kilowatt Crackdown](#)
- [Denver Watts to Water Program](#)
- [Central Florida Kilowatt Crackdown](#)

# Portfolio Manager for EE Grant Programs: Other State ARRA Programs



<b>State</b>	<b>Program</b>
<b>Iowa</b>	<b>Iowa SEP Grant Program</b>
<b>Maine</b>	<b>Efficiency Maine Commercial Project Grant Program</b>
<b>Mississippi</b>	<b>EECBG Grant Program</b>
<b>New Hampshire</b>	<b>EECBG Grant Program</b>
<b>New Mexico</b>	<b>EECBG Grant Program</b>
<b>New York</b>	<b>New York Energy Efficiency Program</b>
<b>Oklahoma</b>	<b>EECBG Grant Program</b>
<b>Pennsylvania</b>	<b>Pennsylvania Conservation Works! Program</b>
<b>Utah</b>	<b>Utah Advanced Energy Efficiency Strategies for Buildings Program</b>

# ENERGY STAR

## Building Upgrade Manual

---



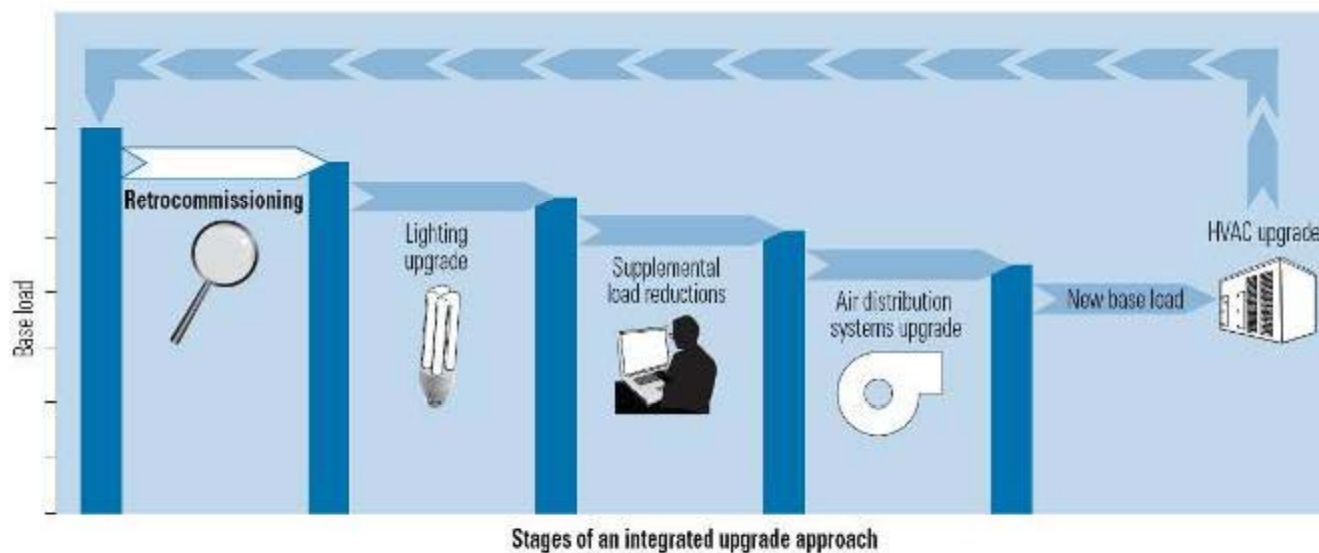
- Developed by EPA to assist organizations in planning and implementing profitable energy efficiency upgrades in existing buildings
- Download the Manual to receive:
  - Comprehensive energy-management guidance
  - Updated resources, case studies, and savings data
  - Information on proven energy-efficient technologies that can produce energy savings of 35 percent or more
- Available cost free at:  
[www.energystar.gov/bldgmanual](http://www.energystar.gov/bldgmanual)

# ENERGY STAR Building Upgrade Manual



Staged approach for planning upgrades to maximize energy savings:

1. Retrocommissioning
2. Lighting
3. Supplemental Load Reductions
4. Air Distribution Systems
5. Heating And Cooling Upgrades





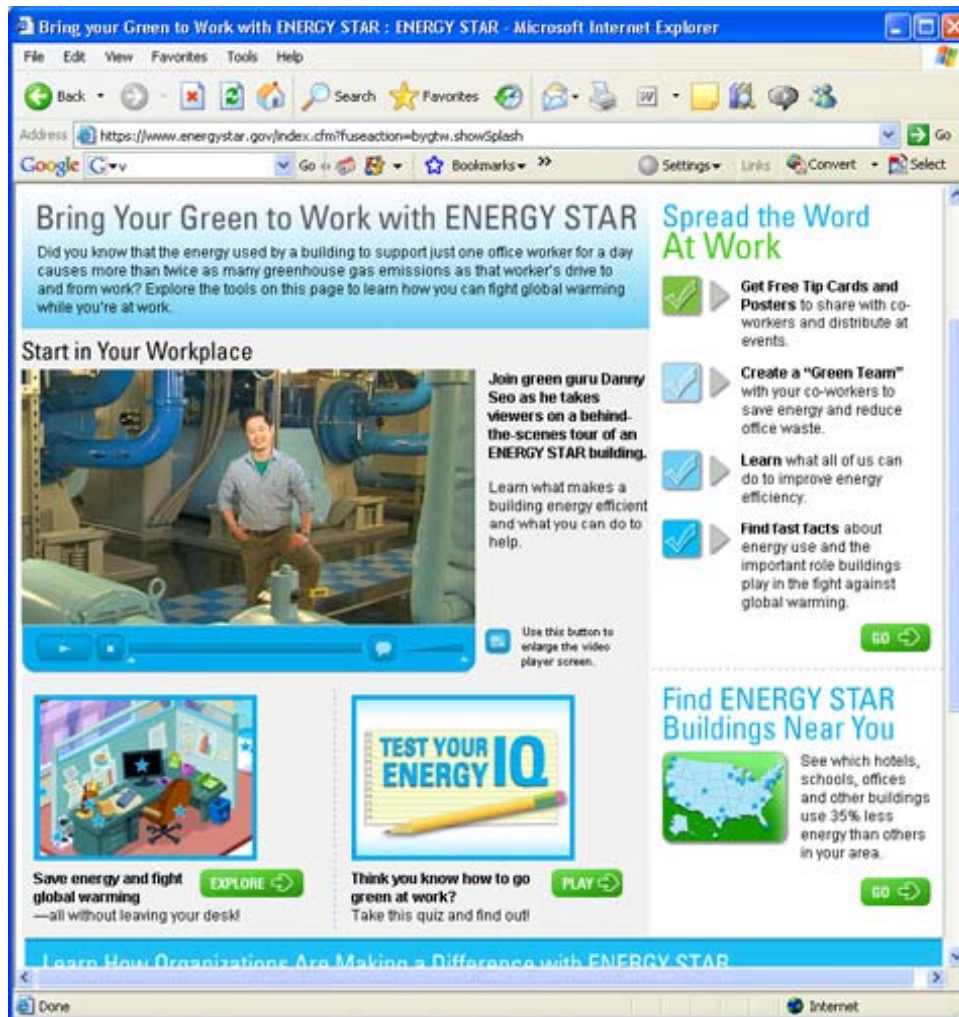
# Engage Employees/Tenants with EPA's "Bring Your Green to Work"



## EPA's Off-the-Shelf Energy Awareness Program

[www.energystar.gov/work](http://www.energystar.gov/work)

# Get Employees and Tenants on Board



- Green Team checklist
- Behind the scenes tour
- Interactive cubicle
- Energy quiz
- Publications
- Fast Facts on Energy



All available at [www.energystar.gov/work](http://www.energystar.gov/work)

# Displays and hand outs



**Bring Your GREEN TO WORK**  
ENERGY STAR with ENERGY STAR®

The small steps you take at work to save energy can make a big difference in the fight against global warming.

**monitor/computer**  
Enable power management settings so they automatically enter a low power mode when not in use.

**desk lamp**  
Replace the bulbs in desk lamps with ENERGY STAR qualified bulbs.

**power strip**  
Use a power strip as a central "turn off" point when you are done using office equipment to conveniently disconnect the power supply.

**cellphone**  
Unplug electronics when not in use.

**you**  
Create a green team with co-workers to help save and reduce office waste.

**Bring Your GREEN TO WORK**  
ENERGY STAR with ENERGY STAR®

Learn how you can make many of the same green choices at work as you make at home to save energy and fight global warming with help from EPA's ENERGY STAR program.

- Save It & Reuse It**  
Use the ENERGY STAR power management settings on your computer and monitor so they go into low power mode when not in use. Also use a power and monitor "turn off" switch when you are using energy. Additionally, discuss the green reports.
- Unplug It**  
Unplug electronics such as cell phones and laptops when they are charged. Adapters plugged into outlets use energy even if they are not charging.
- Light Up Your Work Life**  
Replace the light bulbs in your desk lamp with an ENERGY STAR qualified bulb. It will last up to 25 times longer and use about 75 percent less energy. Turn off the light when you leave, especially at the end of the day.
- Look It Over**  
Keep an extra chair of paper files, and offer your ideas on how to use paper and more energy to save the workspace of the future. See [Recycle](#).
- Team Up**  
Create a Green Team with your co-workers, help support for energy efficiency in your workstation, a modern office space. Set a goal to make your bank ENERGY STAR qualified building.

Learn More at [energystar.gov/work](http://energystar.gov/work)

ENERGY STAR® is a U.S. Environmental Protection Agency program helping businesses and individuals fight global warming through superior energy efficiency.

EPA

Take a virtual tour at [energystar.gov/work](http://energystar.gov/work) and see what else you can do.

ENERGY STAR® is a U.S. Environmental Protection Agency program helping businesses and individuals fight global warming through superior energy efficiency.

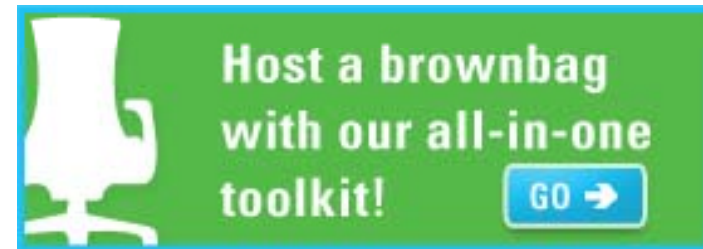


[www.energystar.gov/work](http://www.energystar.gov/work)

# “Bring Your Green To Work” HR Toolkit



Don't have time to pick and choose?  
Want help from the experienced HR  
professionals in your organization?



## EPA's ENERGY STAR HR Toolkit is the answer!

- ✓ Download the powerpoint presentation and speaker notes;
- ✓ Host an employee brown bag;
- ✓ Customize an invitation and poster;
- ✓ Order all of the resources you need with just a click of the mouse!

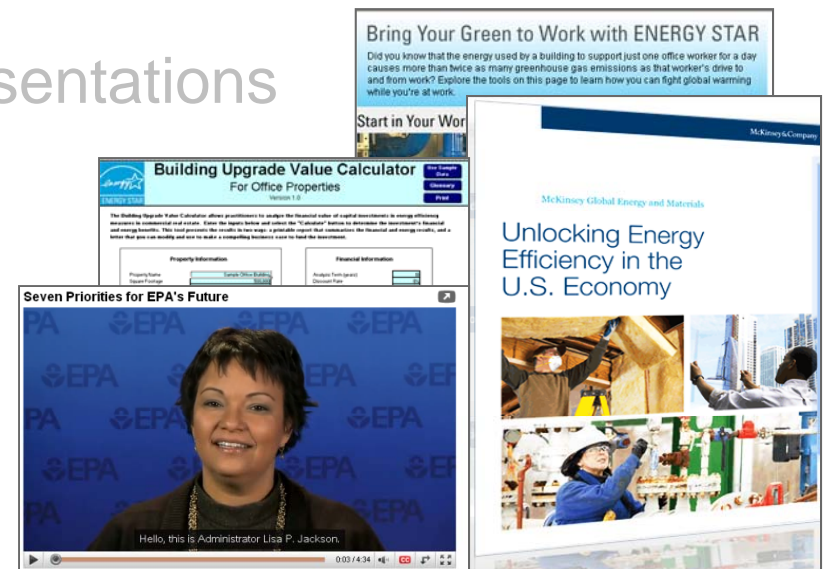
All available at [www.energystar.gov/work](http://www.energystar.gov/work)



# Introduction to Commercial Building Energy Efficiency through EPA's ENERGY STAR Program



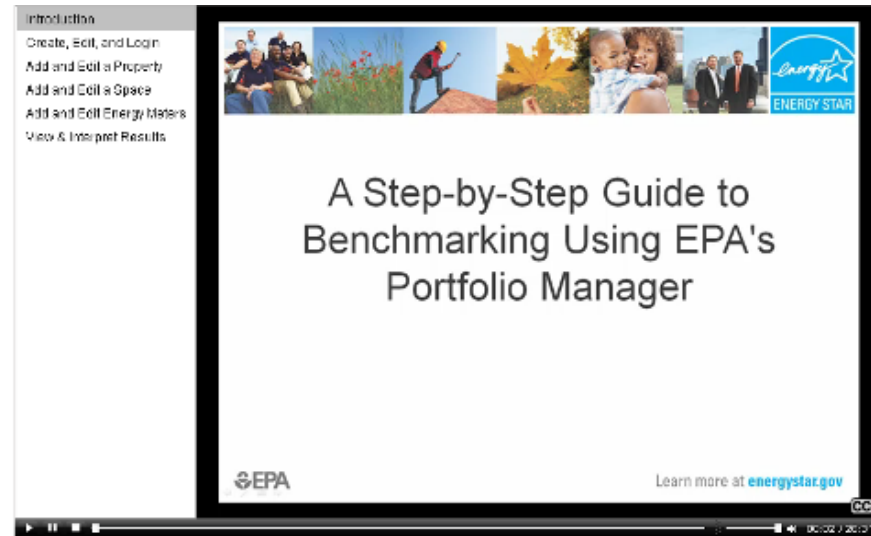
- Gives students practical, hands-on experience with commercial building energy efficiency
- Free-of-charge, off-the-shelf package from EPA
- Includes everything you need:
  - Course Syllabus, outline, and reading list
  - Student project
  - Course lecture plans and presentations
  - ...And more!
- Customize or expand it to your needs



# Tap into ENERGY STAR Training Resources



- **Benchmarking Starter Kit**
  - Animated Portfolio Manager training
  - Data Collection Worksheet
  - Step-by-step Quick Reference Guide
- **Cost-free live and recorded benchmarking trainings**



Available at [www.energystar.gov/benchmark](http://www.energystar.gov/benchmark)



# Tap into ENERGY STAR Training Resources

---



- **Other Available Training Sessions**
  - Commercial Real Estate: Best Practices to Improve Energy Performance
  - Highlighting ENERGY STAR Retail Successes
  - Computer Power Management with ENERGY STAR
  - Financing Energy Efficient Upgrades
  - Launching an Energy Efficiency Competition
  - .....Many more available!

Review topics and register at:

[www.energystar.gov/businesstraining](http://www.energystar.gov/businesstraining)



# Recap: Leveraging ENERGY STAR in EECBG Projects

---



- Remember, as you are launching EECBG programs, ENERGY STAR resources can be integrated into existing programs or used to launch stand alone programs...
- We want to learn more about your plans so that we work together to support common goals!



# For More Information

---



[www.energystar.gov/buildings](http://www.energystar.gov/buildings)

---

If you have any questions, please contact:

Leslie Cook, US EPA  
[cook.leslie@epa.gov](mailto:cook.leslie@epa.gov)  
(202) 343-9174

Caterina Hatcher  
[Hatcher.caterina@epa.gov](mailto:Hatcher.caterina@epa.gov)

