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

# Retail: An Overview of Energy Use and Energy Efficiency Opportunities

Of the almost 5 million commercial buildings in the U.S.<sup>1</sup>, retail buildings account for the largest energy costs – nearly \$20 billion each year<sup>1</sup> – and are also responsible for the second largest percentage of greenhouse gas emissions, leading to global climate change.

By becoming more energy efficient, retailers can increase the comfort of customers and productivity of employees, and achieve cost savings that enhance corporate profitability. By using the Environmental Protection Agency's (EPA) ENERGY STAR tools and resources, retailers can save money and fight global climate change by reducing their energy use through energy efficiency measures.



## Energy Efficiency Tips

### Low-Cost Measures

- > Measure and track energy performance with EPA's Portfolio Manager tool.
- > Establish an effective operations and maintenance program to identify and address equipment issues before they become energy-wasting problems.
- > Calibrate thermostats to ensure that their ambient temperature readings are correct.
- > Set back thermostats in the evenings and other times when a building is unoccupied, and adjust the temperature for seasonal changes.
- > Take advantage of skylights or other natural daylight sources to reduce lighting during daytime hours.
- > Ensure that team members from every department are trained in the importance of energy management and basic energy-saving practices.
- > Use EPA's Target Finder to integrate energy efficiency goals into the design of new properties.

### Cost-Effective Investments

- > Engage in energy audits to identify areas where building systems have become inefficient over time and bring them back to peak performance.
- > Install occupancy sensors to reduce lighting and plug loads in storage rooms, back-of-house offices, and other vacant or low-traffic areas.
- > Upgrade to more efficient lighting technologies, including replacement of T-12 lamps with T-8 and even T-5 fixtures, and replacement of incandescent lamps with compact fluorescent or ceramic metal halide accent lighting. Consider upgrading to LED lighting for outdoor signage.
- > Install window films and add insulation or reflective roof coating to reduce energy consumption.
- > Work with an energy services provider to manage and improve performance.

<sup>1</sup> Source, EIA, CBECS 2003

### Retailers Making a Difference:

**JCPenney, Inc.** became the first retailer to earn the ENERGY STAR for a retail store in October 2007. Since then, JCPenney has continued to measure and track the energy performance of its more than 1,000 stores using EPA's Portfolio Manager. JCPenney has also earned the "Designed to Earn the ENERGY STAR" recognition for new store construction projects, demonstrating a commitment to sustainable energy design.

**Kohl's Department Stores** has earned the ENERGY STAR for superior energy performance for over 160 stores. Kohl's has shared its success with customers by promoting the company's ENERGY STAR buildings and other environmental achievements on screen savers at the end of all check-out aisles, as well as launching a "Kohl's Green Scene" Web site to increase energy and environmental awareness among employees, customers, and shareholders.

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## How to Talk to Retailers about Energy Efficiency

Customer service and satisfaction is the number one priority in the retail sector, and retailers can be hesitant to engage in activities that can be perceived as reducing comfort, convenience, or the brand experience. However, through improvements in energy-efficiency, retailers can increase customer comfort and display social responsibility to



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consumers – adding value to the brand and enhancing customer satisfaction and loyalty. Retailers can reap these benefits all while reducing operating expenses.

By starting with low-cost approaches to energy efficiency improvements, retailers can realize significant savings and leverage savings into more extensive energy performance upgrades in the future. Additional benefits of cost-effective investments include increased sales, higher profit margins, as well as increased employee productivity and health.

Through ENERGY STAR tools, retailers can track the environmental outcomes of implementing successful energy efficiency programs, and enhance their image as a “green retailer.”

## ENERGY STAR Resources

**Guidelines for Energy Management:** Based on the successful practices of ENERGY STAR partners, these guidelines can assist retailers in improving their energy and financial performance while distinguishing themselves as environmental leaders.

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

**Portfolio Manager:** By measuring, setting goals, and tracking energy use, retail stores can gain control of energy expenses. Stores can compare their energy performance on a scale of 1 to 100 relative to similar buildings nationwide.

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

**Building Upgrade Manual:** Plan systematic building upgrades using the 5-stage approach in EPA's Building Upgrade Manual. This online handbook offers guidance for each stage — from no- and low- cost retrocommissioning to more extensive upgrades — as well as a chapter to address retail-specific energy issues.

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

## Recognition for Achievements

**Earn the ENERGY STAR:** Buildings that rate in the top 25 percent of energy-efficient buildings in the nation may qualify for the prestigious ENERGY STAR.

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

**Become an ENERGY STAR Leader:** ENERGY STAR partners who demonstrate continuous improvement portfolio-wide, not just in individual buildings, qualify for recognition as ENERGY STAR Leaders. EPA will recognize building portfolios that have achieved reductions of 10, 20, 30 percent, or more.

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

**Achieve Designed to Earn the ENERGY STAR:** Design projects that receive a rating of 75 or higher in EPA's Target Finder tool, and which are at least 95 percent complete with construction documents, may be eligible for the Designed to Earn the ENERGY STAR.

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

### ENERGY STAR Offers:

- Energy guides and manuals
- Facility benchmarking
- Training
- Technical Support
- Financing resources
- Emissions reporting
- Institutional purchasing
- Recognition
- Communications campaigns and resources

For more information on ENERGY STAR resources and recognition, visit [www.energystar.gov/retail](http://www.energystar.gov/retail).