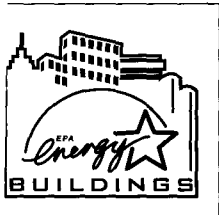




United States  
Environmental Protection Agency

Air and Radiation  
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EPA 430-N-99-004 ✓  
Summer 1999



**ENERGY STAR BUILDINGS<sup>SM</sup> AND GREEN LIGHTS<sup>®</sup>**

# Update

## The ENERGY STAR<sup>®</sup> Label for Buildings — Recognizing Excellence in Energy Performance

Nationwide, commercial  
building owners, managers,  
and operators are evaluating  
their energy use to receive  
the ENERGY STAR Label for  
Buildings, the mark of  
excellence in energy  
performance.

U.S. Environmental Protection Agency  
Region 5, Library (PL-12J)  
77 West Jackson Boulevard, 12th Floor  
Chicago, IL 60604-3590







## INTRODUCING THE ENERGY STAR® LABEL FOR BUILDINGS

# The Mark Of Excellence in Energy Performance

Consumers recognize that the ENERGY STAR label on computers, televisions, and other appliances is a symbol of energy efficiency. By looking for the ENERGY STAR Label consumers can choose a product that will lower their energy bills and help prevent air pollution while offering superior product performance. For the first time, a building can be labeled as ENERGY STAR and receive recognition for its superior energy performance. Like the other EPA/DOE initiatives, the ENERGY STAR Label for Buildings represents achievement of energy performance relative to the market. Buildings that are among the top 25 percent nationwide and maintain an indoor environment that conforms to industry standards can now be designated as ENERGY STAR.

### Benchmarking Energy Performance

Now building owners and managers can also compare a building's energy performance relative to the market, similar use buildings, or a portfolio of buildings. At the core of the ENERGY STAR Label for Buildings is a simple-to-use Internet-based tool (located at [www.epa.gov/buildings](http://www.epa.gov/buildings)) that catalogs all energy uses in a building, calculates an energy intensity, and benchmarks a building's energy performance against similar-use buildings in the United States and provides quick, accurate evaluation of a building's energy performance.

The ENERGY STAR Benchmarking Tool accounts for the drivers of energy use that cannot be controlled, such as location and weather, as well as those drivers that are a reflection of your building's principal business activity, such as occupant density and operating hours. Users simply enter basic information including: building energy consumption; operating characteristics; and physical attributes to obtain a benchmark score on a 0 to 100 scale. Buildings with a score of 75 or higher qualify for the ENERGY STAR Label. More importantly, the Statement of Energy Performance, the result of the Benchmarking Tool, offers objective documentation on a building's efficiency. The ENERGY STAR Benchmarking

Tool can also help building owners and managers set building energy-performance goals; quantify energy consumption, cost, and pollution savings; and communicate building performance to others.

### Recognition for Achieving Excellence

By qualifying a building's performance through ENERGY STAR, an organization can demonstrate that it is serious about energy efficiency and its commitment to the environment. "Every year U.S. businesses pour \$25 billion dollars of profits down the drain in the form of wasted energy from inefficient buildings. Energy-efficient buildings not only conserve millions of dollars in savings for businesses, they can also protect the health and environment for all Americans by reducing the pollution that contributes to global warming," said Carol M. Browner, Administrator EPA, in a prepared statement.

As an ENERGY STAR Building, the facility is provided an *ENERGY STAR plaque* and placed in the *Registry of ENERGY STAR Buildings* located on the ENERGY STAR Label for Buildings Web site. Earning designation as an ENERGY STAR Building identifies your facility as a top performing building contributing to an improved environment through reduced air emissions. Your occupants, customers, constituents, and the general public will recognize this accomplishment as a reflection of your organization's commitment to the health of its business, the building's occupants, and the environment.

### Getting Started

Approximately 25 percent of office buildings now qualify for the ENERGY STAR Label. It is estimated that buildings of average energy performance could qualify by reducing energy use 30 to 35 percent through cost-effective upgrades outlined by ENERGY STAR Buildings. As building managers and owners implement energy-efficiency upgrades, they can use the Benchmarking Tool and the Statement of Energy Performance to record progress toward their goals.

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To assess a building's performance, log on to the ENERGY STAR Label for Buildings Web site at: [www.epa.gov/building](http://www.epa.gov/building).

### Applications Now Being Accepted

Applications are now being accepted for commercial and public office buildings. If your building scores a 75 or greater on the Benchmarking Tool and is verified by a licensed Professional Engineer to maintain current industry standards for indoor environment, then the building qualifies for the ENERGY STAR Label. After receipt of the verified Statement of Energy Performance and an application letter,

EPA will register your building and award you an ENERGY STAR plaque. No fees are involved in using the Benchmarking Tool or applying for the Label and all supporting resources are readily available from the Web site.

Later this year additional building types such as K-12 school and retail stores will be eligible to utilize the Benchmarking Tool and apply for the Label. Visit the Web site, [www.epa.gov/buildings](http://www.epa.gov/buildings), to learn more about the ENERGY STAR Label for Buildings and to view a regularly updated registry of ENERGY STAR Buildings.

## THE FIRST ENERGY STAR LABEL FOR BUILDINGS RECIPIENT

### The City of San Diego, California



The city of San Diego, California is firmly committed to energy-efficient operations. A Partner in EPA's ENERGY STAR Buildings and a participant in DOE's Rebuild America™, San Diego's Ridgehaven Building was recently awarded the first ENERGY STAR Label for Buildings.

San Diego credits its success with the Ridgehaven Building to its team of industry experts from San Diego Gas and Electric, the Electric Power Research Institute, and Public Technology Inc., in addition to numerous consultants, engineers, and architects. With a tight municipal budget, the team decided to use off-the-shelf technologies. Through the use of readily available energy-efficiency upgrades, they were able to reduce energy use at the Ridgehaven Building by 60 percent.

"Our objectives were to walk the talk, to demonstrate we could do with limited resources what we hope other people will do in the community, build an environmentally sound, water-conserving facility within budget that will save

time and money," said Environmental Services Department Director, Richard L. Hayes.

The ENERGY STAR Label is awarded to buildings that score in the top 25 percent of their building class for energy efficiency. San Diego's Ridgehaven Building exceeded these expectations by scoring in the top 10 percent. This efficiency translates into savings of more than \$80,000 in energy expenses annually.

Over the next 10 years, the Ridgehaven Building will prevent an estimated 3,540 tons of carbon dioxide, 10 tons of sulfur dioxide, and 9 tons of nitrogen oxides from being released into the atmosphere. These greenhouse gases directly contribute to three major environmental problems: acid rain, smog, and global climate change.

Ridgehaven Building, San Diego







IMPROVING ASSET VALUE THROUGH ENERGY MANAGEMENT

## Commercial Real Estate and ENERGY STAR Buildings

Utility costs make up nearly one-third of an office building's operating expenses. Improving a building's energy efficiency is a smart way to lower costs, as well as increase profitability and value. A 30 percent reduction in energy costs can translate into a six percent increase in net operating income (NOI). At a capitalization rate of ten percent, each dollar of incremental income can raise a building's appraised asset value by \$10.

To capture this value, EPA recently introduced new ENERGY STAR Buildings tools to meet the needs of the commercial real estate market. This income-property sector comprises about one-third of U.S. commercial and industrial floor space. Partners such as Carr America, Equity Office Properties, Hines, Jones Lang LaSalle, and Boston Properties have already committed to strategically upgrade almost a billion square feet of owned and managed office space.

Through this voluntary, profit-driven opportunity, EPA provides property owners and managers with unbiased technical information, energy management tools and training, and public recognition for outstanding energy-efficiency performance.

One resource example is QuikScope, the new financial analysis software from EPA that provides the answers asset managers are

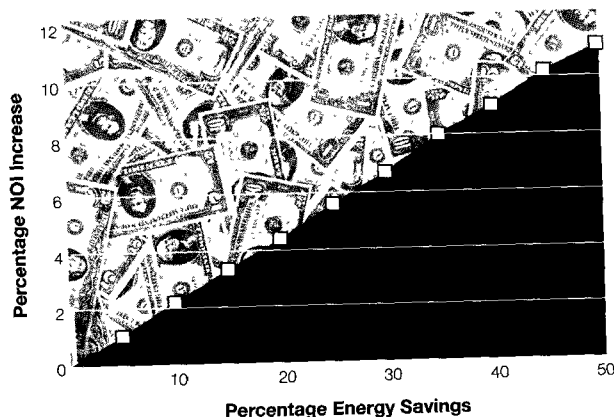
looking for. Available at no cost to Partners, the software uses "what if" scenarios to show owners and managers which properties hold the greatest potential for increasing NOI. QuikScope helps users calculate the actual value of energy-efficiency improvements in multi-tenant buildings and determine the relative importance of cost-recovery strategies, potential rent increases, financing and phase-in options, vacancy factors, and future energy pricing.

"Energy efficiency drives NOI and asset value...Quikscope shows you how," said Joseph Stolarski, Senior Vice President and Director of Technical Services, Jones Lang LaSalle.

In addition, commercial real estate Partners are encouraged to apply for the ENERGY STAR Label for Buildings. The Mark of Excellence in Energy Performance is awarded to companies with superior energy efficiency. It can also serve to differentiate your property in the market and demonstrate the value of enhanced energy efficiency, lower operating costs, and environmental responsibility for current and prospective tenants.

Increasing the energy efficiency in multi-tenant buildings constitutes a win-win situation for the economy and the environment. Lower energy costs make buildings more comfortable, convenient, and attractive—and that means better tenant attraction and retention, higher occupancy rates, and an additional increase in the competitiveness and value of properties. For the environment, energy efficiency helps prevent carbon dioxide emissions, which contribute to global climate change.

For more information about creating value with ENERGY STAR Buildings for commercial real estate, call the toll free ENERGY STAR Hotline at 1-888-STAR YES (1-888-782-7937).





## ENERGY STAR BUILDINGS AND GREEN LIGHTS HEALTHCARE PARTNERS

### Integrating Energy-Efficient Building Upgrades

In today's competitive healthcare market, organizations are constantly searching for innovative ways to contain rising healthcare costs without jeopardizing patient care. To remain profitable, many healthcare organizations are slashing budgets, reducing staff, or forming alliances with other hospitals in an attempt to provide services at lower costs. Fortunately, many healthcare administrators are realizing the money and energy-saving opportunities available through building-wide, energy-efficiency upgrades.

Healthcare is one of the most energy intensive industries in the United States. Due to long operational hours (24 hours a day) and space conditioning requirements, healthcare facilities average 228 kBtu per square foot per year—more than twice as much energy per square foot as typical office space. In addition, hospitals spend an average of \$2.26 per square foot annually on energy and lighting can account for up to 35 percent of their total energy expenditures.

Recognizing the savings opportunities available through energy-efficient building upgrades, more than 875 hospitals and health systems across the country have partnered with EPA in an effort to reduce their mounting energy costs, while also preventing pollution. Since 1991, the ENERGY STAR Buildings and Green Lights Partnership has been helping hospitals cut energy use and reduce operating costs without compromising patient care and comfort. Healthcare Partners have begun to regard energy upgrades not so much as operational expenses, but instead, as long-term investments to improve their bottom line.

In this, the first specialized supplement to the Update, ENERGY STAR

Building and Green Lights healthcare Partners share their partnership achievements. These successful Partners reduced utility bills, lowered energy usage, and prevented pollution through building-wide energy-efficient retrofits.

#### The importance of tracking energy data

The first way for a hospital system to improve its energy savings is by analyzing the organization's energy data. Particularly in the energy-intensive world of healthcare, it is critical to know how and when energy is being used. The key to gaining control over energy use is in tracking each facility's historical electric, gas, oil and steam use, as well as their associated peak demands. QuikPlan, on of a series of ENERGY STAR Buildings software analysis tools, is a good way to organize this data.

Once this information is assembled, pre-upgrade baseline data for each building can be developed, enabling facility managers to gauge the effectiveness of energy upgrades against baseline energy use.

From the standpoint of energy management, energy data can be converted to a standard unit of measure, such as Btu's per square foot. Facility managers use this kind of measure to pinpoint higher-than-expected usage and take corrective action. Just as important, the data can be used to benchmark buildings against each other and against top-performing buildings in the healthcare industry.

A further reason for facility managers to understand their energy use in detail is to guard against major cost swings due to variations in electric and gas rates. Emerging utility dereg-







ulation is creating opportunities to purchase electricity and gas from the lowest cost supplier. After deregulation, those energy managers who know the most about their energy use will be able to leverage that knowledge to obtain the best energy contracts.



### **North Memorial Health Care**

North Memorial Health Care in Robinsdale, Minnesota, understands the importance of tracking hospital's energy use and cost data. Through a comprehensive spreadsheet and sub-metering system, the hospital can pinpoint where and how it is using energy. Chillers and boilers are monitored for efficiency and problems with the physical plan are easily identified and remedied.

North Memorial's utility costs are substantial. Energy data tracking helps the energy team identify the organization's highest energy costs, and use this information as a basis for determining the most feasible and

profitable building improvements. Once new retrofits are implemented, North Memorial continues to monitor energy use in order to calculate the success of the upgrades and to show senior management the extent of reductions in operating costs.

### **Capitalizing on new technologies and applications**

Technological advances and creative applications in energy efficiency now enable facility managers to get more for their energy dollar without sacrificing occupant comfort or indoor air quality. Some of these technologies include dimmable ballasts, occupancy sensors for outside air control, and variable speed drives.

When retrofitting lighting systems from T12 to T8 lamps, hospital facility managers can consider installing dimmable ballasts with photocells. Dimmable ballasts are ideal for areas in the hospital that are close to windows, so that available daylight can supplement the indoor lighting and reduce the burn hours of the lighting fixtures.

Another technological advancement to maximize energy efficiency in hospitals are occupancy sensors for ventilation control in surgical rooms. In this application, the occupancy sensor detects when an operating room is in use and allows the outside air dampers to open to 100 percent.

When the room is unoccupied, the sensor sends a signal to reset

the dampers and allow only the minimum outside air as required by local codes. This system can also be monitored and controlled by the hospital's energy management system.

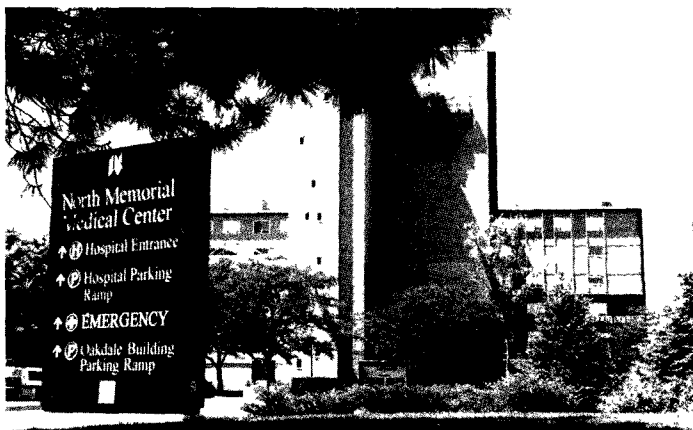
Until recently, most energy systems were designed so that fans, compressors, and pump motors operate at a single (full) speed. Variable speed drives save energy by allowing equipment to operate only to the extent necessary to meet the requirements of the building. Savings come from the reduction in energy needed to operate these systems, with the payoff resulting in lower energy bills and extended equipment life.



### **Mercy Hospital (Pittsburgh)**

Using the ENERGY STAR Buildings five-stage approach, Mercy Hospital in Pittsburgh, Pennsylvania instituted a comprehensive energy plan that resulted in operational and cost savings of more than \$1 million. Working under a performance contract with ENERGY STAR Buildings Ally, Johnson Controls, Mercy retrofitted lighting to high-efficiency T8 lamps and electronic ballasts, expanded an energy management system to allow for better monitoring and control, installed variable speed drives on chilled water pumps, and replaced chillers and cooling towers with new high-efficiency equipment. Most importantly, the upgrades to the 975,000 square foot hospital were complete with minimum disruption of patient service and have allowed Mercy to maintain a clean, comfortable environment that supports the healing process.

*North Memorial Health Care Center*







### **Providence Hospital**

Providence Hospital, a 1.2 million square foot hospital in Washington, DC, installed 10 variable speed drives (VSDs) on the hospital's cooling tower fans, supply air fans, chilled water pumps, and condenser water pumps. Currently, the hospital's facilities managers are using the ENERGY STAR Buildings QuikFan software tool to determine the savings potential of installing additional VSDs. Providence also renovated its chiller plant with three new chillers. And, according to Manager of Engineering Andy Fox, the new steam-powered chillers allow the hospital to comply with CFC regulations and take advantage of favorable gas prices. As a result of the energy-efficiency upgrades, Providence experienced minimal increases in total energy use despite the addition of a 200,000 square foot nursing home facility.



**Paoli Memorial Hospital**  
Jefferson Health System

### **Paoli Hospital**

Paoli Memorial Hospital, a 330,000 square foot hospital located in Paoli, Pennsylvania, is using occupancy sensor ventilation control technology to save money while meeting fresh air requirements in its operating rooms. Paoli has two air handling units serving six operating rooms. Sensors wired to the lighting circuit allow fans to increase the ventilation to 100 percent outside air when occupied. When the operating rooms are unoccupied, the fan speed is decreased to allow for minimum outside air. The

occupancy sensor control technology is producing energy savings between 30 and 40 percent compared to a constant air volume system. Best of all, the new technology performs without compromising local code requirements for ventilation or comfort for surgical staff and patients. Paoli is also actively retrofitting lights and replacing motors with more energy-efficient models.

### **Leveraging savings for energy improvements**

Energy upgrades are one of a few capital investments that generate cash flow to actually pay for themselves. Technologically advanced lighting systems, variable speed drives, and high-efficiency chillers can generate returns on investment of 20 percent and more. For energy-intensive healthcare facilities, with long operating hours and strict temperature and humidity requirements, the opportunity to save is even greater than in other industries.

Lack of direct, out-of-pocket funding does not have to postpone energy-improvement projects, and should not stand in the way of achieving attractive returns. The ENERGY STAR Buildings five-stage approach points to a number

of tune-up measures, including controls adjustments, preventative maintenance, and testing and balancing, that can be implemented at little or no cost.

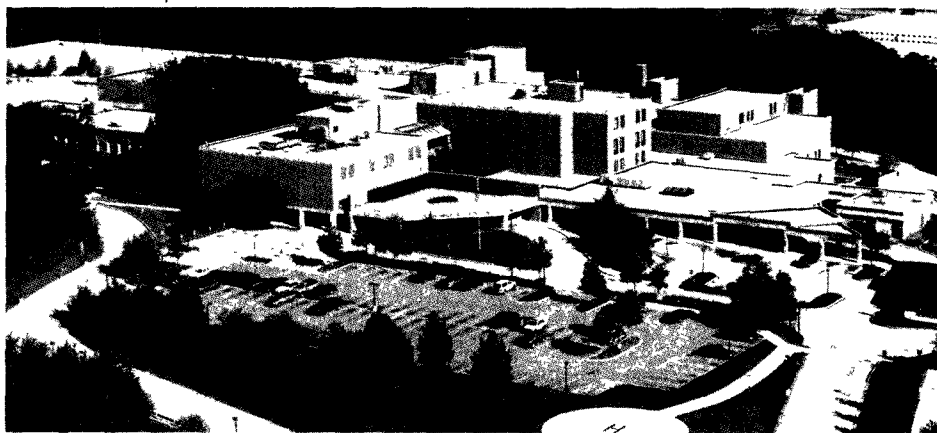
For capital-intensive measures, some utilities have rebates available for energy upgrades, and state energy offices often provide technical support and access to low-cost financing. Creative alternatives even exist where future savings streams pay for the new energy equipment, without any up-front investment on the part of the healthcare organization. The most common of these is performance contracting, in which energy services companies provide the capital and perform the installations, recovering their investment through the savings that the projects generate.



### **St. Joseph's Hospital (WI)**

St. Joseph's Hospital in Chippewa Falls, Wisconsin has reaped the benefits of reinvesting its energy rebates and savings. Northern States Power Company provided rebates for a motor conversion project in the more than 200,000 square foot facility. The

*Paoli Memorial Hospital*







St. Joseph's Hospital (WI)

rebates and energy savings from the project were then funneled back into additional motor conversion upgrades.

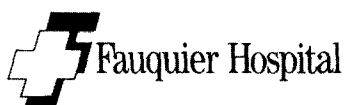
Harold Walters, Coordinator of Plant Services, credits the ENERGY STAR Buildings and Green Lights with providing the initial leverage to help push the motor upgrade project forward. With senior management supporting and encouraging St. Joseph's participation in the partnership, greater priority was given to energy-efficient retrofits. With ENERGY STAR Buildings, Walters believes he would still be fighting for project funding.

### **Communicating your energy success**

One of the best ways to encourage the more efficient use of energy and foster executive support for energy-improvement projects is through effective communication. Many energy users do not realize the dramatic difference that they can make to an organization's bottom line by being energy smart, sometimes reducing energy costs by as much as five percent through behavior alone.

Using the ENERGY STAR Buildings communications tools including press releases, newsletters, and brochures, facility managers can communicate simple measures to occupants, like turning off lights or activating the ENERGY STAR features on their computers. Moreover, organizations can

see the public relations value in disseminating positive messages such as the effect that better lighting has on the work environment, or how upgraded chillers improve building comfort—not to mention the dollar savings and environmental benefits that are the by-products of reduced energy use.



### **Fauquier Hospital**

Fauquier Hospital in Warrenton, Virginia has found creative ways to communicate the success of its Energy Management (EM) plan to its more than 600 employees. The hospital puts a high priority on energy efficiency and the facilities department works closely with the public relations staff to run energy program feature stories and photos in the hospital's monthly employee newsletter. The facilities group also took before-and-after photos of the energy upgrades, and has turned them into a slide show that is being used to promote the success and benefits to the hospital. The show has been presented to the Board of Trustees, employees, and stakeholders.

### **Realizing the benefits of partnership**

The Partners featured in this supplement, along with hundreds of other

healthcare organizations across the country, are enjoying the money- and energy-saving opportunities available through energy-efficient building retrofits. By following the EPA's proven five-stage energy strategy, ENERGY STAR Buildings and Green Lights healthcare Partners have experienced an average annual savings of \$0.63 per square foot. That's equivalent to saving \$899 per bed!

ENERGY STAR Buildings and Green Lights Partners achieve their energy savings with the assistance of unbiased technical information and support from EPA. Software, educational opportunities, Partner networking, facility case studies, and technical documents have helped these organizations save as much as 30 percent on utility bills.

In addition to the valuable technical resources, Partners are offered communications support to promote their pollution-prevention efforts. Press releases, newsletter and trade journal articles, and regional recognition events help healthcare Partners celebrate their energy-efficiency successes.

Furthermore, ENERGY STAR Buildings and Green Lights Partners are helping to protect the environment. Eighty-eight percent of the energy generated in the United States is produced by burning fossil fuels, such as coal, oil, or natural gas. This process produces harmful nitrogen oxide and carbon dioxide gases. Nitrogen oxides contribute to smog and acid rain, while carbon dioxide is linked to global climate change. By eliminating wasted energy, healthcare facilities are both saving money and preventing air pollution.

To learn more about how your healthcare organization can capitalize on the benefits offered through EPA's voluntary ENERGY STAR Buildings and Green Lights Partnership, visit the Web site at [www.epa.gov/buildings](http://www.epa.gov/buildings), or call the toll-free ENERGY STAR Hotline at 1-888-STAR YES (1-888-782-7937).



## REALIZING THE BENEFITS OF GREEN POWER

### Another Approach to Pollution Prevention

Due to widespread interest among consumers for environmentally responsible energy options, an increasing number of utilities and other energy service providers are now offering renewable or "green" power—electricity generated from clean, nonpolluting sources such as solar, wind, hydro, biomass, and landfill gas. For ENERGY STAR Buildings Partners, these new products represent opportunities for organizations to further their environmental and pollution-prevention efforts.

#### Green Power Is Growing

With the advent of utility restructuring and consumer choice, current trends signal an increase in consumer demand away from conventional sources and toward green power. This is projected to not only decrease the use of conventional energy sources, but also increase investments in green power capacity.<sup>1</sup>

To date, more than 60 utilities and energy service providers have established green power programs.<sup>2</sup> Retail access pilot programs have either been completed or are currently underway in the Pacific Northwest, Massachusetts, and New Hampshire.

More than a dozen states, such as California, Illinois, and Pennsylvania, are now beginning to restructure their utility power generation industries. With the opening of the California retail electricity market to competition last April, several energy service providers, including Edison Source, Green Mountain Energy Services, PG&E Energy Services, and Sacramento Municipal Utility District (SMUD), have made green power programs and renewable energy options available to their customers.

#### Green Power for the Commercial and Industrial Market

In the commercial and industrial marketplace, the use of green power benefits companies by enhancing environmental image and community relations, especially if the green power source is local. Several companies, such as Patagonia and Toyota, are already benefiting from the use of green power. Patagonia intends to purchase 1 million kWh per year of 100 percent renewable energy from Enron Energy Services' new 16-MW wind power facility. The company is using power from qualified, in-state renewable projects until the wind project becomes operational in early 1999.<sup>3</sup> Toyota Motor Sales, USA annually purchases 38 million kWh of Edison Source's Earth Source brand of renewable power derived from solar, wind, biomass, and geothermal renewable energy sources.<sup>4</sup> Both companies have also been certified by the Center for Resource Solutions Green-e program as providing power that is at least 50 percent renewable, and can use the Green-e certification logo in corporate marketing and communications materials.

#### Green Power Benefits the Environment

By its very definition, green power produces significantly less pollution than conventional energy sources, such as coal and oil. In 1996, utilities were responsible for 36 percent of carbon dioxide (CO<sub>2</sub>),<sup>5</sup> 73 percent of sulfur dioxide (SO<sub>2</sub>), and 27 percent of nitrogen oxide (NO<sub>x</sub>) national emissions.<sup>6</sup> These emissions contribute to global warming, acid rain, and smog. Further-

more, supplying these conventional energy sources damages the environment through activities such as mining, drilling, and pipeline installation.

Greater use and availability of green power versus fossil fuels will reduce emissions of harmful pollutants and other negative effects of conventional power sources. For example, in California, 55 new renewable projects will be operational by early next year—helping to avoid the annual release of 286,113 tons of CO<sub>2</sub>; 1,300 tons of SO<sub>2</sub>; and 1,634 tons of NO<sub>x</sub>.<sup>7</sup> These projects serve the same goals as the Climate Change Action Plan (CCAP) by reducing CO<sub>2</sub> emissions linked to greenhouse gases and global warming.

#### Green Power and ENERGY STAR

Organizations in support of CCAP now have even more options for preventing pollution. They can join the thousands ENERGY STAR Buildings and Green Lights participants by increasing their energy efficiency and choosing cleaner energy options. Energy providers also can do their part by developing, actively supporting, and promoting green power initiatives.

To learn more about the benefits of green power visit the Interstate Renewable Energy Council Web site at <http://www.eren.doe.gov/irec>.

1 Energy Efficiency and Renewable Energy Network (EREN), Department of Energy

2 Ibid

3 Ibid

4 Ibid

5 "1996 Emissions of Greenhouse Gases in the United States," Energy Information Administration, Department of Energy, 1997, Table 6.

6 "National Air Pollution Emission Trends, 1990–1996," Environmental Protection Agency, 1997, Appendix A.

7 "How Emerging Green Markets Help Respond to Global Climate Change," Renewable Energy Marketing Board, 1998.





## REFLECTING ON THE VALUE OF ENERGY EFFICIENCY

### 1998 Annual Report

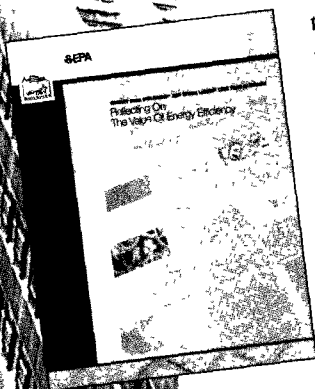
Every year, EPA thanks participants for their pollution prevention efforts and reviews the previous year's accomplishments by publishing an annual report. The report highlights Partners' and Allies success in implementing energy-efficiency technologies and reducing the emissions of air pollutants into the atmosphere.

The theme of the 1998 ENERGY STAR Buildings and Green Lights Annual Report is the value of energy efficiency. Although many variables may affect the success of an organization, the strategic energy management of ENERGY STAR Buildings participants indicates an unmistakable link between energy savings and enhanced environmental performance.

"ENERGY STAR Buildings and Green Lights participants are demonstrating that it is pos-

sible to protect the global climate while simultaneously strengthening their financial performance and the American economy. We've heard many people in the U.S. and around the world say that this can't be done, that acting now to reduce carbon dioxide in the atmosphere will harm our economies. The accomplishments of ENERGY STAR Buildings and Green Lights send a different message," wrote Carol M. Browner, EPA Administrator, in the introductory letter to participants.

The Annual Report was mailed to participants in July. For more information on this publication, visit the ENERGY STAR Buildings Web site at [www.epa.gov/buildings](http://www.epa.gov/buildings) or call the ENERGY STAR Hotline at 1-888-STAR YES (1-888-782-7937).



## ACCESSING THE LATEST PARTNERSHIP INFORMATION

### New ENERGY STAR Buildings Web Site

The ENERGY STAR Buildings and Green Lights Partnership Web site has a new look. In February 1999, the partnership unveiled its more functional, business-oriented Web site. In addition to its updated appearance, the Web site is now simpler to navigate, offering easy access to partnership benefits, tools and resources, and program news.

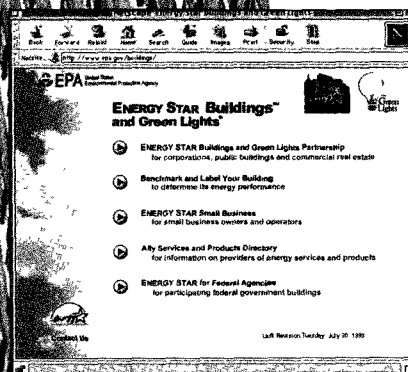
The revised site is also more comprehensive, providing relevant information for both Partners and interested organizations, including information on the latest upgrade technologies and case studies highlighting successful Partner upgrade projects. To date, the site's most popular features are the down-loadable software tools and access to the Ally Services and Products Directory and the ENERGY STAR Label for Buildings Benchmarking Tool.

"We strive to make the site more user friendly, with easy-to-navigate menus and links to useful program resources," said Renee Gutshall, the Web site development manager.

The partnership plans to make frequent updates to the site. In the next few months, visitors can look forward to a number of new, helpful features including searchable partnership lists, a calculator to project energy savings, and a running pollution-prevention tally.

The site will also be used as a means of recognizing participants and communicating their successes. Winners of the Partner and Ally of the Year awards, as well as Partners who excel in the Earth Day Challenge, will be posted on the site.

Visit the new ENERGY STAR Buildings and Green Lights Partnership Web site at [www.epa.gov/buildings](http://www.epa.gov/buildings).





## INCREASING EMPLOYEE MORALE THROUGH ENVIRONMENTAL PROTECTION

### Study Confirms Link

Since its inception in 1991, ENERGY STAR Buildings and Green Lights has changed the way many organizations look at their business. Using today's advanced technologies, participants in the partnership are saving energy, maximizing natural resources, and preventing pollution. While comprehensive building upgrades have a significant financial and environmental impact, energy-efficient operations also improve employee productivity and morale by enhancing the comfort level and appearance of a facility.

Yet, a recent nationwide study conducted by Roper Starch Worldwide for Cone, Inc. indicates that supporting an environmental initiative can positively affect employee morale in

another way. According to the 1999 Cone/Roper Cause Related Trends Report, businesses and organizations that are actively involved in cause-related issues, such as environmental protection, have greater rates of employee satisfaction, pride, and company loyalty. Two thousand Americans were questioned in-person and the following results emerged<sup>1</sup>:

- 90% of employees from companies supporting a social cause feel proud of their company's values as opposed to 56% of employees at organizations that do not support cause-related issues.
- 87% of employees from companies supporting a social cause feel a strong sense of loyalty to their

employer as opposed to 67% of employees at organizations not involved with causes.

- 56% of the employees polled want their companies to become more involved in cause-related issues.

The study also found that cause-related programs served as an important business practice to help companies recruit and retain employees.

For ENERGY STAR Buildings and Green Lights participants, demonstrating environmental leadership through energy efficiency can lead to increased employee morale and loyalty.

## PROMOTING ENVIRONMENTAL LEADERSHIP

### Dollar General Corporation

In March 1999, Dollar General Corporation, a discount retail chain with 3,700 stores throughout the middle and southern United States, launched a comprehensive "Energize TEAMShare" energy-efficiency awareness program to educate its employees and customers about the benefits of saving energy.

By tracking its energy use, Dollar General determined that if its stores reduced their energy costs by 10 percent, the company would save more than \$3 million annually. To help meet this company-wide goal, Dollar General began promoting its energy-efficiency efforts and participation in ENERGY STAR Buildings and Green Lights by printing the ENERGY STAR logo along with the phrase "Prevent-

ing Pollution through Energy Efficiency" on shopping bags.

In addition, EPA helped the company produce an "Energy Efficiency Awareness Kit" that included the development of a cartoon superhero called "Energy Avenger". The Energy Avenger Kit includes a poster, fact sheets with energy-saving tips for the home and the store, and stickers reminding employees to turn off lights, monitor thermostats controls, and close doors.

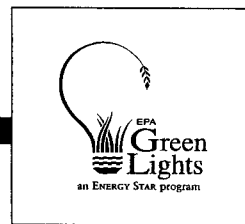
"The partnership with ENERGY STAR has been very beneficial to Dollar General. From product specifications to internal promotion campaigns, ENERGY STAR has provided valuable assistance that almost guarantees these programs' success," said Daniel Stone.

Dollar General continues to develop innovative ways to communicate its commitment to pollution prevention. Currently, the company is offering cash bonuses to participating stores that demonstrate their energy-saving accomplishments.

For more information about how EPA can help your organization promote its environmental leadership, please call the ENERGY STAR hotline at 1-888-STAR YES (1-888-782-7937).








The ENERGY STAR Buildings & Green Lights *Update* is a free quarterly publication with a circulation of more than 35,000. Because the *Update* is circulated not only to ENERGY STAR Buildings and Green Lights participants but also interested members of the general public, receipt of this publication is not an indication that your organization is a participant. To add your name to the subscription list or to find out how to join the partnership, please call the toll-free ENERGY STAR Hotline at 1-888-STAR YES (1-888-782-7937).

The *Update* encourages participants to submit articles of interest and provide input on past and future issues. Although the publication of submissions is not guaranteed, please forward materials and feedback to: *Update* Editor, 401 M Street, SW, (6202J), Washington, DC 20460; or fax to (202) 565-2083; or email to [salinas.sol@epamail.epa.gov](mailto:salinas.sol@epamail.epa.gov)

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## Online

Information about the ENERGY STAR Buildings and Green Lights Partnership and other ENERGY STAR programs are available online.

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## Resources

To learn more about pollution and other environmental issues, visit the related Web sites listed below. These sites address ways you, your organization, and your community can help protect the Earth and its natural resources.

**Global Warming Home Page**  
[www.epa.gov/globalwarming](http://www.epa.gov/globalwarming)

Access information on the science of global warming; current and projected impacts; international and U.S. policies and progress; and opportunities for individuals and corporation to get involved.

**Software for Environmental Awareness**  
[www.epa.gov/seahome](http://www.epa.gov/seahome)

Download free, interactive software on a variety of environmental topics including pollution prevention, resource conservation, and air quality.



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