



Providence Health & Services receive ENERGY STAR awards from the U.S. EPA in Washington, D.C.

It's Providence to Win the ENERGY STAR

Providence Health & Services' energy management vision is to institutionalize energy management into our corporate policies and procedures to ensure that energy will be used efficiently throughout its facilities.

In March, six facility engineers from Seattle-based Providence Health and Services (Providence) system joined their CEO and senior administrators for a celebratory trip to the nation's capitol. They were the honored guests of the U.S. Environmental Protection Agency (EPA) in Washington, D.C., along with companies like JCPenny, Toyota, and Marriott. What do these Fortune 500 companies have in common with Providence Health and Services? They are all 2008 winners of EPA's ENERGY STAR® Partner of the Year award.



Alaska to California. Why did EPA choose Providence as the 2008 ENERGY STAR Partner of the Year for Leadership in Energy Management? Knowing what it takes to win can help you plan a successful strategy for your hospital, your patients, and the environment. And it can improve your profitability and competitiveness, too.

Institutionalizing Energy Management

In Providence's worldview, human health and planetary health are inextricably linked. To heal the patient, they believe, one must also heal the planet. Recognizing that energy use has worldwide public health impacts, Providence places energy management within their Core Values of Stewardship and Excellence. Their vision states in part:

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Providence created an Energy Management Plan to implement this vision. By early 2006, the plan was formally adopted and approved by the top executive offices at Providence:

Every year, the EPA recognizes top partners in its voluntary ENERGY STAR program who have made outstanding contributions to energy efficiency and environmental protection. EPA first selected Providence in 2004 from over 8,000 other ENERGY STAR partners for their efforts to profitably reduce greenhouse gas emissions through energy efficiency (See *Inside ASHE* March/April 2004). This year, Providence was selected from a pool of over 12,000 partners.

Providence Health & Services is a not-for-profit Catholic healthcare ministry of more than 230 healthcare facilities—hospitals, clinics, assisted living, and others—that treat patients in communities from

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GOAL #1

Organizational Commitment:

Organizational commitment throughout the Providence

Health & Services is a key component to success. An office of Energy Management will be established, with its own charter and council to guide its activities. Through making the business case for aggressive energy management activities, top management and other important internal stakeholders will commit to supporting changes in business practices and provide the necessary resources for the energy management initiative to succeed.

GOAL #2

New Construction Practices:

Providence will examine its new construction practices

and make appropriate changes to assure that new facilities and the expansion of existing facilities make maximum use of advances in design and construction practices, take into account life cycle costs associated with the total cost of owning and operating the facilities. Investments in design and construction that reduce Providence's total cost of ownership will be implemented as standard business practice. Construction documents will specify a new Providence "energy performance" standard that exceeds state energy codes. Commissioning buildings, systems and equipment will assure Providence obtains the design and construction benefits identified.

GOAL #3

Facility Operating Practices:

Providence will examine facility energy related

operating practices, and look to establish "best operating practices" based on systemwide operating experience, and the experience of others within the healthcare facilities market. As part of these "best operating practices", specific actions associated with "tuning up" buildings, systems and equipment, as well as operating and maintenance practices geared towards maintaining enhanced operating levels, will be identified. Staff training needs will be examined, and contracts with service companies will be reviewed and revised when appropriate.

GOAL #4

Facility Upgrades:

Providence will incorporate energy management into

facility upgrade opportunities, examining life cycle costs and including total cost of ownership in its decision-making processes on capital projects undertaken when equipment is replaced due to failure or is near the end of its useful life. Providence will also examine potential facility and equipment retrofit opportunities, implementing these projects when the energy savings and related benefits justify the investment.

GOAL #5

Procurement & Utility Cost Management:

Providence will establish and use

procurement standards that incorporate life cycle costs and total cost of ownership when purchasing energy consuming equipment and supplies. Utility costs will continue to be actively managed to minimize costs and exposure to market risks. For natural gas, Providence looks to lower its costs compared to local utility tariffs. For electricity, Providence continues to monitor market developments, and will capitalize on opportunities to lower costs if a more competitive retail market environment develops.

GOAL #6

Monitoring & Tracking Performance:

Providence will establish benchmarks

for monitoring and tracking progress in meeting performance targets associated with the energy management initiative. Monitoring and tracking performance will take place at different levels within the organization. For example, at the facility level energy consumption will be tracked and compared to established benchmarks over time. When specific projects are initiated, more precise monitoring may be warranted to assure expected outcomes are achieved. In reporting on the effectiveness of the energy management initiative overall, financial benchmarks and other indicators of success will be used.


Energy Achievements

In 2007, energy savings at Providence contributed nearly \$4 million to the bottom line, equivalent to generating \$160 million in new business. That's because a dollar in utility cost savings at Providence is directly contributable to the margin available for charitable giving—and it takes \$40 in revenue to obtain that same \$1 in margin contribution.

From an environmental perspective, these energy savings prevented over 53 million pounds of carbon dioxide emissions, equivalent to the emissions from nearly 4,700 cars.

What makes their achievement even more notable is that Providence reduced systemwide energy use by more than 7 percent in 2007, despite merging with Providence Services Corporation and adding thirteen new acute care hospitals and numerous other facilities. Moreover, these savings occurred after energy savings of \$2.3 million in 2005 and \$3.4 million in 2006.

Providence has earned the ENERGY STAR for superior energy performance at 11 facilities across four states: California, Montana, Oregon, and Washington—the most of any private non-profit healthcare system in the U.S.

The U.S. Environmental Protection Agency congratulates the healthcare engineers of Providence Health and Services and New York Presbyterian Hospital, for their dedication to energy management and environmental stewardship, and recognizes their leadership by proclaiming them 2008 ENERGY STAR Partners of the Year. 

Clark Reed is the Director of the Healthcare Facilities Division for ENERGY STAR at the U.S. EPA. Last year, ENERGY STAR helped Americans save enough energy to power 30 million homes, reducing greenhouse gas emissions equivalent to that of 27 million cars—all while saving consumers \$16 billion. More than 62,000 commercial buildings have benchmarked their energy performance as a basis for future progress. To join, visit ENERGY STAR's website or contact the author at the U.S. Environmental Protection Agency - MC 6202J, 1200 Pennsylvania Ave NW, Washington, D.C. 20460. Email: reed.clark@epa.gov Phone: 202-343-9146.

New York Presbyterian Hospital Earns Sustained Excellence Award

2008 marks the fourth consecutive year that New York Presbyterian Hospital (NYPH) has won ENERGY STAR's Partner of the Year award for Leadership in Energy Management and is the first healthcare system in the nation to win ENERGY STAR's Sustained Excellence award. Since joining ENERGY STAR in 2003, NYPH has dedicated \$7.3 million in upgrades specifically targeted to achieve energy savings. These upgrades have saved the hospital more than 11 million kilowatt-hours of electricity, valued at \$1.77 million annually.

It is common for hospitals to use two to four times more electrical capacity for certain rooms, departments, or equipment than was required five to ten years ago. New York Presbyterian Hospital is no exception. They are adding state-of-the-art medical research, testing, and digital imaging equipment to all their facilities. Yet, despite the increases in energy intensive medical equipment, NYPH has continued to save significant amounts of energy over the past three years.

In 2005, NYPH had attained an 11% improvement across nearly 8 million square feet of healthcare space, moving from a baseline ENERGY STAR score of 42 to a portfolio-wide score of 56 within EPA's national energy performance rating system. Although patient admission rates climbed more than 5% in 2006, NYPH was still able to reduce energy intensity by 30 kBtus per ft² across the system. In 2007, NYPH has reduced their energy use by 7.5%, resulting in an annual savings of \$2.16 million or the equivalent of generating \$43 million in new revenues. (For articles on NYPH, see *Inside ASHE* editions for May/June 2007, Sept/Oct 2006, May/June 2005).